# HIT Policy Committee
# Final Transcript
# January 10, 2012

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**
Thank you very much and good morning. This is Mary Jo Deering from the Office of the National Coordinator for Health IT. This is the 31st meeting of the Health Information Technology Policy Committee. I will begin by taking the roll, but I will remind people that this is a public meeting and there will be an opportunity for public comment at the end. A transcript will be made of this meeting. I will begin with Dr. Mostashari?

**Farzad Mostashari – Health and Human Services – Office of the National Coordinator for Health Information Technology**
Here.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**
Paul Tang?

**Paul Tang – Palo Alto Medical Foundation**
Here.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**
Dr. Agarwal?

**Madhulika Agarwal – Veterans Administration**
Here.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**
David Bates? Christine Bechtel? Neil Calman?

**Neil Calman – The Institute for Family Health – President and Cofounder**
Here.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**
Larry Wolf for Richard Chapman? Adam Clark? Wes Perich for Patrick Conway?

**Wes Perich– Centers for Medicare & Medicaid Services**
Here.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**
Art Davidson.

**Arthur Davidson – Denver Public Health Department**
Here.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**
Connie Delaney?

**Connie White-Delaney – University of Minnesota/School of Nursing – Dean**
Here.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**
Paul Egerman?

**Paul Egerman – Businessman/Entrepreneur**
Here.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**
Judy Faulkner?

**Judy Faulkner – EPIC Systems Corporation**
Here.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**
Tom Green? Gayle Harrell? Charles Kennedy?

**Charles Kennedy, MD – CEO Accountable Care Solutions - Aetna**
Here.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**
David Lansky?

**David Lansky – Pacific Business Group on Health – President & CEO**
Here.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**
Deven McGraw?

**Deven McGraw – Center for Democracy & Technology – Director**
Here.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**
Frank Nemec? Marc Probst?

**Marc Probst – Intermountain Healthcare**
Here.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**
Josh Sharfstein? Latanya Sweeney? Rob Taglicod?

**Robert Tagalicod – Centers for Medicare & Medicaid Services**
Here.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**
Scott White?

**Scott White – 1199 SEIU United Healthcare Workers East**
Here.

**Mary Jo Deering, Ph.D – Senior Policy Advisor – Office of the National Coordinator for Health Information Technology**
Thank you very much. Dr. Tang or Dr. Mostashari?

**Farzad Mostashari – Health and Human Services – Office of the National Coordinator for Health Information Technology**
Happy New Year. We have had a wonderful year. I had the opportunity to reflect a bit over the season about what we did kind of a month by month basis, some landmarks I think in the past 12 months and I think it's a good time to look ahead at 2012 and what we see having looked back at 2011, what we see coming forward. I think someone said to me people want predictability in government and I think that is a good point. And we look back at what I said in last year, January 11th or 12th, in terms of what 2011 was going to be, we are going to be focusing on and I said I think I will say a lot of the same things. So, there you have it in terms of predictability and keeping to the course.

Meaningful Use is going to continue to be really the cornerstone of a lot of our activities and we are going to see some numbers as we closed out the year, we expect to see those rise and continue to rise and we are going to do everything we can to make sure that as many providers and hospitals are successful at achieving Meaningful Use in 2012 and it is going to really be an all hands on deck this year in terms of states, in terms of providers, in terms of vendors who are going to be really asked to step up to rise to the challenge, and it is a challenge. We know that, but we believe, and I think the response from the community has been that it is going to be a challenge well worth meeting.

So, Meaningful Use, 2012 really is going to be the year where Meaningful Use soars not just takes off but soars and that is going to be a huge priority. The other thing that I said last year and I will say again this year, interoperability and exchange is kind of our second and possibly more complex challenge and the key things there are reducing the cost of exchange and interoperability through standards, through services and through reducing some of the risk and liability, things like poor patient matching that introduces risk and therefore cost to information exchange. Looking at ways to increase the value of information exchange. Obviously, this is not something that we are in the driver's seat on but we are the beneficiaries of in a significant way and I think the movements that we have talked about before towards payment reform and changes in how providers and hospitals are paid by private health plans, by states, Medicaid, as well as Medicare are going to increase the value proposition, the business case for information exchange and care coordination. So that is going to be the second part of fostering information exchange.

And the third part is to make sure once we do that, once we reduce the cost of the transactions, once the value increases information will begin to flow. But it will flow at the speed of trust and that is going to be initially local, people who are, as Tim Cromwell from the VA talked about people being on a first name basis exchange. Exchange among people who know each other on a first name basis. It is going to start that way and it is going to go from a trickle to a flow to a flood as trust builds over time, but there are I think actions that we can take to help establish some of the preconditions for trust and that is going to be I think a major goal for 2012 through the discussions we are going to have around governance and proposed regulations around establishing governance structure for the nationwide health information network.

So, we talked about Meaningful Use and exchange, the third and something again, not a surprise, not something new necessarily but something that I think in 2012 we are going to begin to see it really roll is around consumer health IT and the consumer part of the eHealth agenda, not just in terms of patient observations being incorporated into clinical information systems, as important as that is, but also looking at how consumer eHealth, separate and apart from the electronic health records, can help improve patient self-management.

We are doing a lot of activities now around that, a healthy apps challenges with the surgeon general, videos that we are asking people to prepare in terms of how they are improving their own health, using health IT, but also changing the relationship that people have with their own care and for their own caregivers. I think we are going to begin to see that start to roll a little bit more. I talked last year about safety being an issue and we had kind of a landmark, I think, in terms of the IOM study and 2012 is going to be the year where we implement those recommendations. We are going to have the surveillance in action plan before the 12 month deadline that the IOM suggested and we are going to work again with industry, work with providers with the experts on making sure that we put forward really a feasible and smart approach to addressing this really critical issue.

I talked last year, and will repeat it this year, about quality measurements and in some ways it is frustrating that we feel like we have made progress but still so much more work to be done across the entire lifecycle of quality measures from prioritization to specification, to making sure that they can be calculated consistently and having a platform for quality measure calculation and standards, the code sets, the value sets, all the way through that, the testing tools, the implementation specifications and so forth. A lot of work was done in 2011, but I think 2012 is going to be an even bigger year for really looking and I think connecting even more with a broader quality measurement community around moving forward into this next generation of quality measurement.

I think it is also going to be a key development and understanding that we need to not only have the infrastructure and the policies, and the technology for measuring quality but also for improving quality and to have the afferent and efferent arms of quality in the form of whatever you want to call it, all right, decision support is a part of it, population health management, some people say care management, but the concept that you are really going to increasingly providers are going to be looking to take responsibility and accountability for the health and the cost of their entire population of patients and we need to be supportive of that in our activities.

So, a lot on the table for 2012. I think there are going to always be some challenges that we meet better than others, but looking back at 2011 it is astounding how much progress was made. It was really maybe the biggest year to date but we hope to, just as we have surpassed month by month, the previous month on Meaningful Use, we hope 2012 will be just as big if not bigger in terms of making progress on these. So, it is a partnership and I think we have gotten here by kind of being pretty good about staying true to our principles and, you know, I do this…I'd do it again of just reminding ourselves, and the folks who are listening in terms of how we approach the problems that we do approach and it is being principled about it and those principles are making sure that we listen, that we have open and inclusive processes and the work of the Federal Advisory Committee's, these committees have been I think models for how to do that.

It is really having the end in goal, working backwards from the results we wish to see in all of these, not getting mired in particular technology or policy choices, but really being true to the kind of eye on the prize, but being based kind of feet on the ground in terms of where we really are today. It doesn't mean that we can't be bold, but it does mean that we have to live in the real world and be evidenced based, monitor and adapt to what happens.

We are going to use the market. We believe in the market. We believe in an efficient market being the best tool for innovation and for creativity and productivity, but we are going to do that while making sure that we do what we can to make the market perform more effectively, more efficiently, and we are going to make sure that we watch out for those least able to benefit from and don't forget about the least, those who don't have a voice, and make sure that we think about that as well.

And finally, putting the patient and their interests, including their privacy and security in the center of everything that we do. So, let's get started. I'm very proud of our work together and I can't wait to hear about what we've done this year. Thank you.

**Paul Tang – Palo Alto Medical Foundation**

Good. Thank you very much Farzad and I will join you in your assessment that 2011 was really an amazing year, congratulations to you and the office on such an exceptional performance in terms of how these policies are shaping up American Healthcare.

**Farzad Mostashari – Health and Human Services – Office of the National Coordinator for Health Information Technology**
Actually, I have one thing I forgot to mention. In keeping with our pledge, this administration's pledge towards transparency and open government and sharing the information that we have, we've worked with CMS to make a public use file available on healthdata.gov it's up now, if you go to healthdata.gov that is a public use file of the Meaningful Use attestations and it includes some information on the month in which the attestation was done, the state in which the attestation was done, whether it was the Medicare or Medicaid Program and the vendor that vendor or in the case of modules, vendors that were used in achievement of Meaningful Use.

So, I suspect that will be of keen interest rather than kind of pre-analyze the information and put out some, you know, tables or reports, we thought we will put it out there, the public use file, we'll keep updating that file and, you know, Merry Christmas to the healthcare IT analysts and vendor rating systems out there. Good luck.

**Paul Tang – Palo Alto Medical Foundation**
So, as you promised last time it is there. The information is public and will be updated. So, as Farzad said, this is definitely going to be a continuation of the year of Meaningful Use and we are going to try to help make it soar and I'll partner with you in terms of providing whatever kinds of advice and input that can be of benefit. So, this day actually is going to be a lot on Meaningful Use and it will start out with CMS, Rob and Jessica presenting really some amazing numbers even compared to the month before. Then we will go into looking at planning for both of these FACA Committees, the HIT Policy, HIT Standards. As you know we are working in tandem. We try to move the policy up front but it is really an iterative process. So, we are planning together, and you are going to hear some of the initial thoughts from HIT Policy, from ONC, what are some of the requirements they have, and John Halamka is going to present on behalf of HIT Standards and this is going to be an iteration. So, at least on the policy side this is not the final policy, these are some of the thoughts for this group's input as we plan for 2012.

We will also talk about, after lunch, some initial recommendations from the Meaningful Use Workgroup for this Policy Group discussion on its way to Standards. As, you know, we are trying to hand them some information to start working on in advance and there is some timely issue we would like to get over to Standards quickly and so we want to get your feedback on that this afternoon. And then close with another thing of interest to Meaningful Use and HIT, which is vocabulary and datasets. Just like Farzad was saying quality measures are extraordinarily important both for the quality of care and for payment, well it just doesn't move without appropriate standards and that is work that has been underway for a long time but we are going to get an update on how are we doing with the vocabulary set and in particular the value sets, something important not only for Meaningful Use but for this upcoming ICD-10 migration. So, a lot of good information today and looking for your input and discussion.

Let me begin with approval of the minutes from last time, you all had that sent ahead of time. Any discussion? Anyone want to move that we approve the minutes?

**M**
Move to approve.

**Paul Tang – Palo Alto Medical Foundation**
Thank you and seconds?

**W**
Second.

**Paul Tang – Palo Alto Medical Foundation**

Any further discussion? All in favor?

**M/W**
Aye.

**Paul Tang – Palo Alto Medical Foundation**
Any opposed or abstained? Thank you. Okay so we are going to begin with the good news from CMS and Rob and Jessica are going to update us on how did we close out 2011 recognizing that there is still a couple of months left for the 2011 cycle, at least for the EPs in the world. So, Rob and Jessica?

**Robert Tagalicod – Centers for Medicare & Medicaid Services**
Great, I'm the other Rob; I'll give just a few introductory comments before I turn it over my colleague Rob Anthony and Jessica Kahn. But, I have to say I do agree it is a happy new year. I wouldn't have used the word soar back in August, as you well know and there has been a change in both my attack and tone in my voice, so I think the numbers will soar. I'm consummately conservative when I do projections because one the data point doesn't make a trend, but several do, and I think to steal a little bit of Jessica and Rob's thunder, if you look at slide 6 and 7 the trend line is pretty high and we are working closely together in order to sustain that. So, it is a partnership indeed not only between CMS and ONC but other folks in HHS as well as the VA, etcetera. So, it looks very hopeful and we hope to continue that in 2012.

I just want to draw your attention to some of the general numbers you are looking at now $2.5 billion in EHR incentive payments made in 2011 for both Medicare and Medicaid. We have over 176,000 providers registered for the Medicare and Medicaid EHR incentive programs. And we are actually looking, even today, more providers coming in and it is very hopeful. Again, that is a trend and we hope that it continues throughout 2012. And I have to say December was exceptional. It was a strong month in terms of both performance not only in terms of the number of providers who registered, but also who were paid and the number of providers who came to our website to attest. So, you see now the numbers of those paid, attesting, registering kind of like where they seem to be desperate we seem to see again an upward trend. And so that is good news for us. And that will be continuing into 2012.

I think for the Medicaid Program the deadline for receiving the payment for adopting, implementing and upgrading certified EHRs incentives in 2011 is at the discretion of the states, as you well know, and so it maybe as much as 90 days after the calendar year. So, it's not over until it's over for 2011. So, we anticipate those numbers to increase as well, as well that it is somewhat true for the Medicare Program, because we're looking until the end of February to see those numbers.

We are presently consulting with the Office of the Secretary both ONC and CMS regarding what those trends look like, what those numbers mean in terms of projections and again we're pretty confident about what 2012 looks like. So, rather than get ahead of the announcement of the secretary, I just want to give you a sense that we are advising her and her office, and her staff that some of the numbers that we initially projected we probably will meet and more than meet. And again, I used a conservative trend line and I am going "wow we're even going to meet it even using the most conservative of projections."

So, as I reported a few months back, ONC and CMS are working very closely together identifying segments of the market if you will and it is yes we are working very closely with the market and with providers to say what kind of training, education, or technical assistance you need, and again it's customized in order to sustain that upward trend in terms of AIU or Meaningful Use. And so without further adieu I would like to turn it over to both Jessica and Rob Anthony to deeply dive into those numbers.

**Robert Anthony – Centers for Medicare & Medicaid**
So, I sort of want to have balloons coming down and everything else for this because it really is a great how we closed 2011 message here. In the month of December we had nearly 19,000 providers register for both Medicare and Medicaid EHR incentive programs, that is a little bit less than what we had last month, which was almost 24,000, but it is still indicating a strong interest in the program and for those of you who remember, as we go back reporting the months where we were looking at a few hundred

providers or a couple of thousand providers we are continuing to see this strong trend of tens of thousands of providers coming in a month and registering. We've got nearly 124,000 Medicare EPs registered at this point in time. That is about a little over 30% of all potential Medicare EPs, that number is about 382,000. I'm going to let Jess sort of jump in on the Medicaid numbers, that is a little bit more of a fluctuating number than it is for Medicare.

**Jessica Kahn – Centers for Medicare & Medicaid**
Right, sure, hi, so 49,000 to date is great, but remembering that at the time in December we had 41 states that had launched and EPs can only register for Medicaid if their state had launched, so just to put a context it in that's not a national denominator that's in 41 states. So, there is always sort of caveats in the Medicaid data. We are big fans of small print. So the other small print story there is again that they have, as Rob had mentioned, in some cases, through the end of March, to register for the 2011 calendar year. And that is because some states did not launch their programs until the fall and we did not want to preclude people's opportunity to participate in the program and some very large states launched in the last quarter of the calendar year, and so they are definitely moving their EPs toward that 2011 payment for Medicaid.

**Robert Anthony – Centers for Medicare & Medicaid**
On the hospital side, we have a little over 2800 hospitals registered. So, we're closing in on the 3/5 mark of all of the available eligible hospitals and critical access hospitals that can participate. So, we have, as Rob mentioned, a little over 176,000 registered providers as of the end 2011 and we're closing in on that 200,000 mark. I did want to emphasize and you will see this on the bottom of a number of our registration payment information slides, we tend generally to bring our, I won't say best guess, I will say that our best estimates at the time to this meeting, and then we finalize the reports on our website. I would urge folks especially I know there are a number of people from the press who look at these numbers to check for the final numbers on our website at the address here in the bottom right-hand corner. You will find if we have any kind of updates we are going to post it to that area. Updates such as you may notice that we did not correctly add up the total on the Medicaid numbers, which will be corrected on the CMS website.

So, in Medicare, we made almost half a billion in incentive payments to providers in December, about 5000 eligible professionals and almost 200 hospitals, that's a little bit of an increase over the number of EPs that were paid in November. We paid a little over 4200 in November. And the encouraging news is that we are continuing to see some very good traffic for attestation for Meaningful Use on the Medicare side. It is too early in January to say if we are going to continue to see that, but it is encouraging. We weren't sure whether everybody was rushing in at the end of the year to get everything in or whether everybody realized that they have that February 29th date to get their attestation in for Meaningful Use on the Medicare side and it looks like we still have a pretty good flow of traffic. So, hopefully, we're going to see some pretty good January numbers as well.

And the exciting news, of course, is that we moved past the billion dollar mark at the end of the year here, 1.3 almost 1.3 billion dollars, that is a marked increase over where we were in November where we were just a little bit below that billion mark. So, very encouraged about the Medicare numbers and where we've ended up at the end of the year for Meaningful Use payments. And I'm going to let Jess talk a little bit about the great news on the Medicaid side.

**Jessica Kahn – Centers for Medicare & Medicaid**
He's just excited because they caught up to Medicaid, because we hit $1 billion first.

**Robert Anthony – Centers for Medicare & Medicaid**
Surpassed.

**Jessica Kahn – Centers for Medicare & Medicaid**
Just saying. So, I put a caveat at the top of this slide it is very important for you to know we talk about Medicaid making AIU payments but Medicaid has actually been making Meaningful Use payments to dually eligible hospitals all along. So, the Meaningful Use payments are not just Medicare payments, those dually eligible hospitals have received millions and millions of dollars in Meaningful Use payments

for Medicaid as well. So, these are the numbers. They are completely dependent upon the states that are making payments. And we have a slide coming up that talks about how many states are making payments, not all of the 41 that had launched are actually issuing checks. Like, CMS staged it for Medicare, they had launched registration and then a few months later attestation and then a month later payment, many states are doing the same. So it's not the same 41 states that have their doors open for registration that are making payments. And so these are the numbers. And a reminder that we have both the dually eligible, acute care and critical access hospitals but then we have Medicaid only hospitals which are children's hospitals, a few cancer hospitals and fingers crossed, soon eventually some of the territories.

**Robert Anthony – Centers for Medicare & Medicaid**
So, just a combined slide, all said in the month of December alone, the Medicare and Medicaid EHR incentive programs made almost $700 million in incentive payments to providers. We ended the 2011 year, as Rob had said, a little over $2.5 billion. It was not that long ago that we had been right at the edge of the billion mark and already we are starting to see some pretty quick growth on it. I think it is something that CMS is very proud of. I think it is something that everybody who has had a hand in working on this can be very proud of. And as I said we are continuing to see those numbers go up.

I love it when I can put together growth charts that have this big of a slope on them. As you can see, and we did a little bit of this last month, we are continuing to see that number of providers paid per month go up. We anticipate that we are going to see that same number in January. We have a number of people sort of who have done their attestation, but did not quite make the cut-off date for payment for Medicare. So, we are going to see a large number on that side.

**Jessica Kahn – Centers for Medicare & Medicaid**
And January will include some big numbers from New York and California I expect as well, which is definitely trend shifting in size.

**Robert Anthony – Centers for Medicare & Medicaid**
Of course, you love that, that greater than 45 degree angle heading right up the chart. And we anticipate, you know, because of the numbers that we are seeing of people who have come in and attested that we are going to see some pretty large numbers on both sides for January as well.

**Jessica Kahn – Centers for Medicare & Medicaid**
This is a map of Medicaid in the states over time. I thought it was interesting for you to see the real uptake that happened particularly in the last six months of 2011. We now have, as of January, as of today, 43 states that have launched their programs and 33 of them are making payments. The data that we gave to you is based on December, so that was the 41 states and 31, but I wanted to give you the January picture because we did add Colorado and Kansas this month to the launch list. Congratulations to both of them. And every month states are adding to the list of those who are making their payments. And as I said, we have some very large states, Illinois, California, New York who are ramping up the payments. New Jersey is starting, so those numbers are only going to grow within those 43 states and then as we also bring up new states to launch as well. This is hard to see on the slide, but you have it as a reference and it is on our website where you can see the breakdown by states of where they are in their status of their program.

**Robert Anthony – Centers for Medicare & Medicaid**
Now, we are going to delve a little bit into some of the Medicare attestation data. I think we wanted to put some caveats around this data. You know, at this point in time, we really only have Medicare EPs that are attesting to Meaningful Use, that is the data that we have here. The Medicaid EPs are attesting to adopting, implementing and upgrading at the state level. We have acute care and critical access hospitals can be receiving a Meaningful Use incentive payment from both Medicare and Medicaid, but the information that we're getting here is on the Medicare side. This is what we're getting through the CMS website through that attestation module. Medicaid only hospitals of course are also attesting to adopting, implementing, and upgrading. And, I guess from January 4, we are going to start seeing some Medicaid MU data.

**Jessica Kahn – Centers for Medicare & Medicaid**
Yes, a number of states have now opened up their doors for Meaningful Use attestations for Medicaid. So, the January reports are going to start to look different because now we're are going to actually have to break out for you, whereas Medicaid Meaningful Use, and it's important again just to remember the different types of eligible professionals who will be coming in as well as the different types of clinical specialties more pediatricians and OB/GYNs, and so forth. So, it will start to be an interesting look at which objectives they are picking out of the menu and so forth, thinking about it within that mindset of this could be a nurse practitioner or this could be a dentist, this could be a certified nurse midwife not just necessarily a Medicare physician.

**Robert Anthony – Centers for Medicare & Medicaid**
So, just some quick highlights on things. I think everybody who has heard me talk has heard me talk about the "n" and you've generally heard me talk about how we don't have the "n" so the question is that as we are doing better and better do we have the "n"? And the short answer is sort of. We probably have a critical mass, enough of a number. We don't necessarily have what we would call a representative sample. Partially it's because we only have the Medicare side of the data for EPs and acute care and critical access hospitals, but partially also because we don't necessarily have a representative sample of specialties. And, really some of this is a timeline.

So, what we have and what we're looking at now is sort of what we're looking at and what we know about early adopters. We're going to be looking at this data to see that as more people come in 2012, as more people on-board with systems and do their first 90 days of Meaningful Use on the Medicare side, is this going to hold? Is it going to hold on the Medicaid side as people move over from an AIU to a Meaningful Use? So, we're going to talk a little about sort of the trends we're seeing of the early adopters here and those are the things we're going to be looking at as we move forward.

So, what do we know? Well, you know pretty much the same three things that we've been talking about, but I think we can say them now with a little bit more confidence because we have more of this data with early adopters. With the early adopters, we're seeing people greatly exceed what those benchmarks are, that threshold of, you know, 10, 40, 50%. They are scoring much higher. We do have still, you know, every threshold has some providers that are sort of on that borderline, but in general on average, they are really blowing away those numbers.

There is not much of a difference between the performance of EPs and hospitals at this point. And there is not that much of a difference among specialties in performance. There is somewhat of a difference in the exclusions and I'll talk a little bit at the end of this about some of what we're seeing in a very general way about a couple of specialties. I think again, we don't have enough information for it to be conclusive, but we are sort of going to be looking to see if that trend holds as we move forward.

So, at that time we did this analysis, we had 33,000 Medicare EPs that had attested, 33,240 successfully, 355 unsuccessfully. I don't expect anybody to remember, but the last time we talked about this, there were 444 EPs that were unsuccessful. The number has gone down because we have 89 folks who had previously not been successful, resubmitted their attestation for a different period or maybe they made a mistake in information, in any case they went back resubmitted and were successful with it. We did have 842 acute care and critical access hospitals that attested and all of those have been successful.

So, I'm going to go through and this is sort of what we've seen in the grouping previously when we talk about, I want to explain it again, when we talk about performance we're talking about the average score, the numerator/denominator score here. When we talk about exclusion, we're talking about the number of folks that have claimed the exclusion for that particular objective. And similarly for deferral, we're talking about the number of EPs or hospitals that have put that menu objective off in favor of something else. You'll see that some of these have a nonapplicable deferral, that is because they are core objectives and everybody has to do those.

We do group the recording objectives together, that is a number of different objectives. So, it is recording a problem list, a medication list, medication allergy list, vital signs, demographics, smoking status we group all that together. So, we are continuing to see some pretty high numbers in this regard. The lowest number, again, on here is the send reminders to patients. But that is a pretty low threshold; actually it's a 10% threshold. So, 61% is exceeding that pretty far.

I'm only going to highlight a couple of areas here where we've seen a change. Most of the changes have only been a percentage point or two from the last time we looked at this. We have seen an increase, a slight increase in the number of exclusions for computerized provider order entry; it has gone from 14 to 17%. A slight increase in the number of exclusions for ePrescribing from 19 to 22. A slight increase in the number of deferrals for incorporating clinical lab results, 32% to 36%. And another slight increase in folks who have taken the exclusion for drug formulary checks, it has gone from 11% to 14%. And we have seen a small decrease in the number of folks who have deferred the patient list; this is generating a patient list using the certified EHR. So, we've gotten more people who are choosing that as a menu option.

Again, just to highlight here, we do have the very high-performances overall on this. We are continuing to see a high exclusion rate on eCopy of health information as we've talked about before, the exclusion is for providers that do not have anybody who requests and electronic copy of their health information during the reporting period. As there is more of a public awareness of the ability to get that electronic copy, we may see that exclusion rate begin to go down. A slight increase here in that 75%, it was 67% previously, I'm not sure that it's necessarily statistically relevant at this point in time. We just want to kind of keep an eye on that as time goes on. I think it will mean more as we look over a long-term period. And similarly, a slight decrease in the performance for timely electronic access. It was averaging 78 and now it's averaging 75%.

The numbers for the objectives around improving care coordination have stayed fairly steady. This is medication reconciliation and providing summary of care for transitions of care. Again, the deferral rates on this are fairly high. These are menu objective as we move into Stage 2. We've indicated that the menu objectives will become core. So, we may see a difference in performance as we move forward with these.

And then finally, on the EP side the population and public health, these are the submitting information to immunizations and syndromic surveillance databases. A slight decrease in the performance 42% to 34%. We're seeing an increase in the number of exclusions. Again, we did clarify for a number of folks how the exclusion worked, what people could claim an exclusion for various immunizations or syndromic surveillance submitting. So, that could account for some of the fluctuation in numbers here. Syndromic surveillance stays fairly low performance-wise, this is the number of people who have selected that, but we're continuing to see more of these come online. So, we may see some of these numbers change.

Again, not a great difference here for hospitals, still pretty high numbers on things. A slight increase in the recording objectives. It went to an average of over 90% to an average of over 93%. A slight decrease in the advanced directive deferrals from 16 to 13. And a slight decrease in the lab test result deferrals. That essentially means that we've got a few more hospitals that are doing advanced directives and incorporating lab test results.

Same situation with high exclusion rates on eCopy of health information, eCopy of discharge instructions. This is if nobody asks for those then they can claim an exclusion for it as the awareness goes up we will probably see that go down. Medication reconciliation and summary of care stayed the same. And then a slight increase from 15 to 18% in syndromic surveillance performance.

So, as we've gotten a few more providers into the EP side, we've started looking at where some of the specialties are and how they are scoring in various areas. We're seeing family practice, internal medicine, and optometry are the highest for CPOE at this point in time. And that was a little surprising to see optometry in that area. Optometry and podiatry both had the lowest rates of recording vital signs. Many of them also claimed an exclusion for this. Gastroenterology had the lowest rate for patient

electronic access, lower by 10% than other specialties and providing patient education resources, optometry was nearly 10% higher than any other specialty, podiatry was nearly 20% lower than any other specialty. These we are really going to look at as we go forward to see as we get more people within those specialties, is this a trend? Is a workflow related? Or, is it something that as we get more of a critical mass in each of those specialties we're going to see it even out? Because the very encouraging thing that we look at is that across the rest of the measures, there is pretty much consistency across those specialties. So, we're seeing some pretty high-performance regardless of specialty on the EP data.

So, I just wanted to reiterate, you know, some of this is preliminary data that we bring to you. In this case we actually got some final numbers together in time. We aren't always able to do that, so we do a little bit of our best estimate work and you should definitely check out the official data on the website. We do a monthly report. We do some more detailed state breakdowns as well and the website is included here. There are states that are going to be accepting Meaningful Use attestation for hospitals in January. So we are going to start seeing some of that data. And certainly, as states begin accepting Meaningful Use attestations from Medicaid EPs in April, that will also be when we start to see some of the first year participants for Medicare come in. They will have been able to do their 90 days during the calendar year.

And, just a sort of an advanced notice, in February and in April, we are not going to be able to provide an update for the HIT Policy Committee simply because of where the dates fall for the committee. We're not going to be able to run our monthly reports out of our database in time to be able to process and get it to you, but, coming March, that will be after the end of the February 29th, everyone should be in for the calendar year so we should have a very good picture of what we're looking like for calendar year 2011 and we'll have a pretty good idea of where we're headed for 2012.

**Paul Tang – Palo Alto Medical Foundation**
That was absolutely wonderful. It's very exciting to see the progress of this program. So, we join in your celebration of what you've accomplished in 2011 and really look forward to blowing the top off in 2012 I think, probably will, because it is the first two years, especially for the EPs. So, let me open this up for any questions or comments from the committee. Marc?

**Marc Probst – Intermountain Healthcare**
First, this is really, really helpful. Thank you for the work that you are doing and the comprehensive way you're looking at it. You're looking at more data obviously than what you are presented to us. Any recommendations? I mean, as you look at the numbers, the number of EPs or the number of hospitals, hospitals were 15% or so, any recommendations based on what you're seeing to this committee that we should be thinking about?

**Robert Anthony – Centers for Medicare & Medicaid**
Again, I think we're really in early days. We have this very limited view of sort of this very small part of the audience. We're seeing the early adopters, we're seeing Medicare. I think we want to have a better idea as time moves forward are we going to see the same trends on the Medicaid side? What we're really interested in is moving into 2012 what kind of trends we see with other providers that are just coming on board.

We do periodic field surveys through CMS and we take a look at what sort of some of the barriers and obstacles are that face providers who are trying to get their programs up and running and we know sort of some of the hot spots for folks. I think we want to pull that together in a more comprehensive format to try and present, but we want to see how much our surveys matchup with what we are going to see coming in with attestation. I think, right now what we're seeing, is we're seeing really high scores, but we're seeing it from the advanced guard, the people who are most likely to perform highest on this because they were most ready for it. I think that as we move forward we'll have more of an idea of, real ideas moving forward of what is facing providers.

**Marc Probst – Intermountain Healthcare**
And, just thank you for doing this, this has been very helpful.

**Robert Tagalicod – Centers for Medicare & Medicaid Services**
And I think in the interest of transparency we'll be working together and again, as I was saying, we are working with ONC with the RECs to understand what the barriers are and maybe we can report out and give you a kind of anticipation of what we're looking at and how we're targeting certain populations and maybe see some trends, not so much these numbers, but in terms of what we find. So, hopefully we can provide that in the next meeting.

**Robert Anthony – Centers for Medicare & Medicaid**
You know, and it was the mention of transparency that reminded me Farzad had mentioned that there is a file up on healthit.gov that shows the EHR vendors what's being used by which providers who are meeting Meaningful Use. We are also, in the interest of transparency, putting together a public use file that provides more granular data on Meaningful Use attestations and where people score so that people like me who are data geeks can do a little bit more sifting and going through things. And we're in the process of de-identifying that file now and hope to post that on the CMS website fairly soon.

**Robert Tagalicod – Centers for Medicare & Medicaid Services**
Just a clarification. I think its healthdata.gov.

**Robert Anthony – Centers for Medicare & Medicaid**
My mistake.

**Robert Tagalicod – Centers for Medicare & Medicaid Services**
It's the open data website.

**Madhulika Agarwal – Veterans Administration**
Mr. Tagalicod?

**Robert Tagalicod – Centers for Medicare & Medicaid Services**
Yes.

**Madhulika Agarwal – Veterans Administration**
So, a quick question and you may already be doing this, you have noted that there is a difference in specialties currently under specialty performance. So, are you looking at what are the contributing factors that are accounting, is it workflow? Is it related to templates or whatever that might be? Because that is information that can be useful downstream.

**Robert Anthony – Centers for Medicare & Medicaid**
Yeah, absolutely. I think we do have some specialty information. I don't think that we have enough to definitively say, you know, this specialty is facing a particular obstacle on this objective. I think as we get more people in, we are going to have more of, back to the "n", we'll have more of an "n" in each specialty to look at that and we'll have something more representative. Again, we're looking at the first line people; we're looking at the early adopters. So, I hesitate to draw conclusions about what obstacles may or may not be facing a particular specialty based on the early adopter's performance.

We may discover as we move further down this road as we get more Medicaid folks in, as we get more Medicare first year participants in 2012 that they are our additional obstacles that face them. We have some qualitative information about certain specialties either through talking directly with some of those specialties or some of the specialty associations or through the field surveys that we do about particular obstacles and some of them are workflow related, some of them are business operations related and some of them are certainly, I think, an information gap and that is where we're sort of concentrating some of our efforts in concert with ONC to see how we can sort of plug that gap and help people make the leap.

**Madhulika Agarwal – Veterans Administration**
Thank you.

**Paul Tang – Palo Alto Medical Foundation**
Okay. Larry?

**Larry Wolf – Kindred Healthcare – Senior Consulting Architect**
So, I'll add to the, both thanks to you guys for pulling the data together and to the providers as a whole for actually achieving these great results. It's really quite wonderful to see the progress we're making even though there still is a long way to go. So, looking at the long way to go, I notice that the values for the information exchange are also at low performance and high deferral. Are you getting any insights into what those barriers are?

**Robert Anthony – Centers for Medicare & Medicaid**
Well, I would say for information exchange the actual values are relatively very high. They're just relative to perhaps some performance, in other areas a little lower and part of that is certainly that information exchange is more difficult to do than implementing changes in the workflow for recording vital signs and some of these other areas. Some of it, I think we discussed a little bit before is not enough of a critical mass of people to exchange with out there. Some of it is certainly we know a knowledge gap or lack of information about how to exchange, the ways in which to exchange, the HIEs that they might be able to use locally.

**Jessica Kahn – Centers for Medicare & Medicaid**
I would also add that some of the types of practices that have been working on this the longest who are focusing on medical homes, safety net clinics are going to come in under Medicaid. So, we would also expect to see higher, we would hope, performance in that measure under those that have been working on that network capacity prior to HITECH and have support either through HRSA or other federal efforts to support that.

**Larry Wolf – Kindred Healthcare – Senior Consulting Architect**
I guess one of the reasons for asking is, you know, we make broad statements about the difficult to do information exchange, there is interoperability issues, there are lots of theoretical issues, but where we can learn about both successes and specific barriers to go "oh, it's not coding everything enough to flow into the ocean" there are a couple of very specific things we should be paying attention to. So, the extent to which you start to see that either through surveys or through other methods.

**Robert Anthony – Centers for Medicare & Medicaid**
I think qualitatively, we're actually finding, at least through some of our field surveys, that one of the barriers for EPs, and this is on the Medicare side, is finding somebody to exchange with. So, again, as I think you have more people.

**Larry Wolf – Kindred Healthcare – Senior Consulting Architect**
So a critical mass issue?

**Robert Anthony – Centers for Medicare & Medicaid**
Right. As you have more people on-board that probably becomes less of an issue.

**Jessica Kahn – Centers for Medicare & Medicaid**
What is the next question? The next question is in Stage 1 is just to attest, is whether that test passed or failed and the same would go for the public health measures. And we are not asking that in our current attestation, we're just saying did you send a test yes or no? But we're asking the states on the Medicaid side in their attestations to actually collect and did the test pass or fail? So, we're trying to get to that next bit, because if it passed then we have a greater expectation. We say, "Oh that was a success" not only did they find somebody to test with, but there was interoperability there. But, if they found someone to test with and those tests all failed, then the data isn't very illustrative to us. So, just again a caution about what the limitations are on the information that we have about some of those that have somebody on the other receiving or sometimes not receiving.

**Larry Wolf – Kindred Healthcare – Senior Consulting Architect**

Thanks.

**Paul Tang – Palo Alto Medical Foundation**
David?

**David Lansky – Pacific Business Group on Health – President & CEO**
Thanks. I think the release of the public use file on the healthdata.gov is really great. It's a great step forward, but it looks like it does not have the identity of the actual recipient on there. What is the policy issue around disclosing the identity of who is being paid?

**Robert Anthony – Centers for Medicare & Medicaid**
So, we do disclose the identity of who is being paid on the Medicare side. If you visit the same data and reporting section we post a quarterly file of the EPs, Medicare EPs on hospitals that have received a payment. We actually specify this in the regulation that we are going to post name, business address, and phone number. We don't post payment amounts and we certainly don't post any data that can be connected to who was paid. So, we won't say that provider "x" received "x-thousand dollars" and scored 42% on eCopy of health information, but we will indicate who was paid.

**Robert Tagalicod – Centers for Medicare & Medicaid Services**
And David, if you want to encourage health plans or purchasers or others to include as a part of their provider lookup whether the provider is a meaningful user, I think that is something they could do.

**David Lansky – Pacific Business Group on Health – President & CEO**
Yes, so that could be cross-referenced to the Medicare site, Rob?

**Jessica Kahn – Centers for Medicare & Medicaid**
It can be cross-referenced to Medicare. It was actually a statutory requirement that CMS post that. It's not the same for Medicaid and unfortunately, a large part of that is because of the stigma that can come into play about be considered a "Medicaid provider" that said, we have had states asking us "hey what if we want to make those names public too or maybe at least just the hospitals and some others?" So that's up to them that's their prerogative. We have told them, you know, it's not a requirement, but if that is something you feel like would be helpful, again, whether it's all an managed care state for Medicare that might be a little bit different story.

**Paul Tang – Palo Alto Medical Foundation**
Maybe you can start a label "Got Meaningful Use?"

**Jessica Kahn – Centers for Medicare & Medicaid**
Yes, that is the next T-shirt for him, right?

**Paul Tang – Palo Alto Medical Foundation**
Yeah, absolutely. Deven?

**Deven McGraw – Center for Democracy & Technology – Director**
You know the threat of discussion that we just had about the issue of exchange and making sure we have the infrastructure, and standards, and governance in place, as Farzad mentioned earlier, to make that happen, led me to the following suggestion. Every Policy Committee now we get an update on Meaningful Use and I think that is a great idea. We have federal dollars that have gone out to support exchange too and for a while we were hearing some details about where the direct project was going, but we haven't actually heard much about it since then. And I'm certain that there is work going on in both of those initiatives, but we should be hearing regularly about that, too. So, I suggest that we add that, if possible, to the agenda, an update on where efforts to support exchange are going, where they are in the pipeline, what more we might need to do, for example, to provide some policy clarity if that is in fact something that is missing.

**Farzad Mostashari – Health and Human Services – Office of the National Coordinator for Health Information Technology**
The advantage we have, I think it's a really great point that we can't take our eye off the ball and that monitoring and feedback works for everybody not just for providers. The challenge is the data. And, I would love, love, love, love to have, you know, monthly data as CMS does on how many providers, how many transactions have happened, where have they happened, how many providers have done this, but there aren't ways of collecting that data as a routine byproduct of running any process. So, I would love to have it to be able to report it, but my concern is that we can give you program updates, but it is not going to be, I think what you are really looking for, which is what is the state of information exchange.

**Deven McGraw – Center for Democracy & Technology – Director**
Yeah. I think that's right. It is not going to be the sort numbers and we love these numbers, but I still think even a programmatic update and maybe monthly is really too much to ask.

**Farzad Mostashari – Health and Human Services – Office of the National Coordinator for Health Information Technology**
I think maybe.

**Deven McGraw – Center for Democracy & Technology – Director**
But, we haven't heard in a long time.

**Farzad Mostashari – Health and Human Services – Office of the National Coordinator for Health Information Technology**
Sure.

**Deven McGraw – Center for Democracy & Technology – Director**
And even just a programmatic update on a periodic basis I think would be enormously helpful as we are sort of continuing to press for exchange, you know, the Meaningful Use Workgroup contemplating more robust exchange requirements for Stage 2 or stage 3 rather, I mean we already have some on the table for Stage 2 that are under consideration by you and CMS for Stage 2 and I think everybody agrees that that is a tough nut to crack. And keeping a closer eye on that and providing assistance where it is needed, from a policy standpoint or, you know, with respect to standards from their point of view.

**Farzad Mostashari – Health and Human Services – Office of the National Coordinator for Health Information Technology**
Yeah, Deven, and I think the other issue that is raised is given how desirable it is for transparency as well as for good policymaking to have that information it's something we may want to consider as something we would get comment on as part of governance around data intermediaries is perhaps there should be some transparency around the volume of transactions and so forth around it, you know, not just being content with the data we have, but also thinking about ways of systematically being able to monitor that.

**Jessica Kahn – Centers for Medicare & Medicaid**
I just wanted to say that I think the question then would be around, as you noted, federal support for HIE. So it's both ONC and its CMS and in some cases it's CDC, it's HRSA. So, just when we think about what the programmatic response would be, if you want to phrase the question in a way that we could all think about what would be most helpful to this committee and with HHS then we can provide that information.

**Deven McGraw – Center for Democracy & Technology – Director**
Yeah, I mean, you know, I think the two components that occur most obviously to me are the state HIE grant program that was in HITECH and what's the status of the direct project?

**Paul Tang – Palo Alto Medical Foundation**
Thank you. So we are running overtime on this so Judy the last question.

**Judy Faulkner – EPIC Systems Corporation**

Yes. I am commenting on both David and Deven's remarks about why are the numbers low and the direct project, what I have seen when one vendor tries to go directly to the other and back is that the two barriers tend to be that not both healthcare organizations have the latest releases from their vendors that can support that. So there is a delay as one might have to take a year or so to start planning it and getting it in etcetera. And the second, is then their lawyers and their compliance officers often have to meet and work together and work out the terms between the two organizations which can be a significant slowdown. So, my question is, are there national rules of the road that everyone can sign so that as soon as you work with this other organization you know that they have signed and you do not have to have individual lawyers working together making it much slower.

**Farzad Mostashari – Health and Human Services – Office of the National Coordinator for Health Information Technology**
Stay tuned, right? Well, I mean that's the idea behind the work, the recommendations around the Governance Subcommittee and Policy Committee was that if there is a process for having a voluntary system where people who want to get a label, a brand, you know, kind of think, you know, Energy Star, right? That there should be a process whereby different organizations get validated or verified as being compliant with conditions of trust and conditions of interoperability. And that once you're part of that group there would be less of a need for that organization to organization vetting and lawyers, and so forth. So, those are the recommendations we got from the Governance Group and that's what you should expect to see as part of the governance in the NPR.

**Paul Tang – Palo Alto Medical Foundation**
Good. Well, thank you very much Rob, Rob, and Jessica…Robin, yeah.

**Deven McGraw – Center for Democracy & Technology – Director**
I think you should ask them to change their names.

**Paul Tang – Palo Alto Medical Foundation**
Yeah, that's right.

**M**
Hear, hear.

**Paul Tang – Palo Alto Medical Foundation**
Okay, as I said we are going to start talking about plans for 2012 in terms of the agenda for this group and the agenda for standards and how we work together. So, Jodi has put together some initial thoughts from an ONC/HHS perspective what kinds of policy issues are on the agenda on which they would like to have input from this group. And so, these are some of the initial thoughts. These are for discussion in this group for prioritization, feedback and then we'll come back in February, which is only three weeks away, and update that as we set an agenda for 2012. Thanks, Jodi?

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**
Thank you, Paul. So, as Paul said, and I have asked Josh to join me because there was a quality discussion before this so I'm not up-to-date on the latest on quality measures and wanted to make sure that Josh can bring that to the table. This is just sort of some ideas from our perspective of issues that have been on the table that we need to be on the table, some future ideas. I don't expect that the Policy Committee will take on all of these. This is really for discussion and to get folks thinking about what we are thinking about and where we might benefit from your input. On some of these I have more detail than others because we thought about them more than others or we have a better sense of where we're headed, timing, things like that and others are a little bit more open-ended and just open for discussion.

So, I divided this into five categories and I'll walk through each one. Regulations, adoption and use of Health IT beyond just the regulatory structure, strategy, some continuing discussion in areas where we have sort of had some preliminary conversations we have already been working on some issue but would

like to continue the discussions with you all, and then some emerging issues, which I will probably have the least to say about, but just want to kind of throw some ideas out on the table.

So, to start, regulations, this is easiest one because it is the one that is most concrete, but obviously, we have the Meaningful Use Stage 2 NPRM that is soon to be coming out. We are targeting CMS and ONC with our standards and certification rule are targeting February for putting out the NPRM. And we obviously are going to want input from the Policy Committee on our regulations. Usually these have a 60 day comment period, so we'll need some quick turnaround from you all. And I suspect that there will be input from a variety of different Workgroups on the regulations, most obviously the Meaningful Use Workgroup but the Quality Measures Workgroup and perhaps some others. So, as soon as that rule comes out we will, you know, obviously talk with Paul and try to figure out how we can quickly tee that up to the Workgroup so that we can get you to start thinking about your response and giving us some input on that.

Meaningful Use Stage 3, the Meaningful Use Workgroup has already begun looking at Stage 3 and we expect them to spend more time focusing on this and sort of thinking ahead to where we need to be or should be shooting for the next stage of Meaningful Use. So, obviously work to be done there from the Policy Committee and particularly the Meaningful Use Workgroup.

And then as Farzad just raised the governance rules. We have decided, as he just mentioned, that we are planning to put out an Advanced Notice of Proposed Rule Making that is what the "A" stands for before putting out a Notice of Proposed Rule Making or NPRM. As we are working on this we got great feedback from the Policy Committee to input into our thinking, but there are still so many questions and areas where we really wanted to get more public input before we came out with a proposal. So, we have been working on an ANPRM on governance of the Nationwide Health Information Network. And we have a lot of questions built-in where we want to get some feedback. So, again, we would expect that we would talk with you all about getting some feedback and your input into our Advanced Notice of Proposed Rulemaking perhaps reconstituting the Governance Workgroup, but there are going to be a couple of Workgroups that I think would be interested in looking at this, most notably the Privacy and Security Tiger Team. So, that again, timing on that less confident, but we are shooting for the 1st quarter. So, those I think will dominate a lot of discussion in the February/March timeframe. Is there anything else you wanted to say about that?

**Josh Seidman, Ph.D.- Director for Meaningful Use, Office of Provider Adoption Support - Office of the National Coordinator for Health Informatino Technology**

I'll just say on the Stage 3 just a couple of quick things, one is that as you prepare your recommendations for Stage 3, as much as summer camp was very much fun for the Standards Committee they would really like to have more time to do their work. So, one of the things is to bring recommendations forward earlier so that we can give the Standards Committee maybe even some school year time to work on their work. And then in terms of some of the things that the Meaningful Use Workgroup has already raised for Stage 3, the incorporation of patient generated and patient reported data is an important thing and so there probably will be a hearing sometime in the spring timeframe around how to bring that into Stage 3 and what the implications for that are. And then the quality measures, which we will talk about more soon.

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**

This one I would say is probably the biggest chunk of work. So, we have been talking at ONC about 2012 being the year of Meaningful Use and figuring out how to accelerate attestations for Meaningful Use Stage 1 and increasing that curve, hearing that increase of the curve that CMS demonstrated. Again, the scenario where we may want some Policy Committee input on how we increase provider adoption and Meaningful Use, any input about what differentiates those providers that are sort of doing this and doing it well versus those that may be having a little bit of a harder time in reaching Meaningful Use according to our regs. So, that is an area where we may want some input. Anything on that?

Quality improvement and I am going to mostly turn this over to Josh given the early morning conversation on this, but I'm talking about quality improvement instead of quality measures. I know our Workgroup is

Quality Measures, but really thinking about not only how do we measure quality but how do we get that into practice more quickly so that it can actually improve the quality of care, so taking the measures and in more real-time or closing that gap between collecting information about quality and using that information to improve the quality of care. We will need input from the Policy Committee both on the Stage 2 Meaningful Use NPRM and the proposals in there, but also on sort of the longer-term strategic issues, the lifecycle of quality improvement and quality measures development, and how we can make quality measures more useful to providers and improving quality of care for patients. Josh, do you want to?

**Josh Seidman, Ph.D.- Director for Meaningful Use, Office of Provider Adoption Support - Office of the National Coordinator for Health Informatino Technology**
Yeah, I mean, I think really it's a question of both involving the potential set of measures that can be used so that we are both doing things that are HIT enabled, things that we couldn't do before from a quality measurement perspective because we didn't have the robust clinical electronic information infrastructure that we have had in the past. And then the second is things that are HIT sensitive that really make sure that we are using quality measures to get at important care processes, advanced care processes that really show us that EHRs are meeting Meaningful Use and how can we make sure that new measures are doing that.

At the same time, we need to build measures in a more effective, efficient way than we have in the past so that we are not just retooling old paper-based measures which aren't the most necessarily effective measures for an electronic world. And so, those are the kinds of things that we want to do from that measure development perspective. At the same time, there really is this issue that Jodi was talking about to make sure that data can really be used, it can be used for accountability purposes by purchasers and payers and others who are trying to ensure that there are ways to assess the quality and efficiency and safety of care. But, also, for providers themselves for real-time quality improvement purposes and what are the data infrastructures, data intermediaries, other types of HIT infrastructure that needs to be in place to make that happen.

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**
The third item here is engaging non-eligible professionals, non-eligible providers. So, we know that the EHR incentives program does not cover all healthcare providers and that there are other healthcare providers that are really critical for care coordination, improved transitions of care, improved quality of care and the like. So, questions about, and we've been spending some time internally trying to better engage non-eligible providers to try to meet our longer-term healthcare outcomes, care coordination objectives understanding that the Meaningful Use incentives are not going to be available for all those providers. A couple of the areas that we have been spending some effort on are behavioral health, long-term care. Also, there has been some thought, particularly with our new Deputy, Judy Murphy, about the role of nurses and engaging nurses and the use of Health IT as the frontline. So, trying to, you know, perhaps getting input on additional strategies for engaging these providers and encouraging adoption of Health IT by these providers that are not eligible for incentives and how best we can do that and there are a couple of ideas that have been discussed before at least with some folks in this committee but by getting some more of your recommendations and input on that.

Fourth, we had health IT workforce. I have been talking with our office of provider adoption support about our workforce program and they are looking at sort of the next phase of workforce and how they can both make this better as well as think about ONCs role with respect to Health IT workforce as the grant programs may not provide funding for supporting this in the future. Obviously, workforce is having an available, knowledgeable Health IT workforce that is critical for adoption implementation and Meaningful Use by healthcare providers, and trying to get some sense of what ONC could and should be doing in order to address this issue even as our grant funding may dwindle in that area.

So, some specific areas that our…team has identified is industry-wide advocacy for workforce training and development, building awareness of the need for workforce development, developing innovative learning environments to train the workforce, dissemination of tools and best practices for professionals to

succeed, good characterization of the workforce and optimal education. So, this is, as I said, an area where we would love some input and some thoughts here and if folks are interested in talking more about this, we can bring in our experts in ONC who have been living and breathing this and have been running our program to train Health IT workforce and make that available to support adoption and Meaningful Use.

And the fifth is consumer e-Health. As, I know all of you know, because we have briefed you on it and have even more directly engaged some of you all, we have launched our consumer e-Health Program. We launched this in September. We are, at this point, primarily focused on promoting easy electronic access for patients to get their health information so that it can be useful to them and that tools hopefully could be developed to help them use that information to better manage their own health and care. We are also looking sort of ahead in the Meaningful Use space at patient generated data and the policies that need to be in place in order to make that possible and more feasible. So, kind of the immediate thinking about patient access to data and kind of in the longer-term the patient generated data and how that could be useful in a clinical context.

I just want to announce two things because we would love, not only your recommendations and input, but your support on our pledge program, which we have to have organizations pledge to promote easy electronic access to help information for consumers and while this is not directly on topic I feel like I need to use this opportunity to announce that we just launched our first consumer video challenge moments ago. It's a New Year's resolution challenge. We are asking people to submit videos; we're having a contest for folks who submit videos on how they plan to use Health IT to support a New Year's resolution for improving their health or managing their own health and wellness. So, please look for that, promote it if you are willing.

And we will be having a series of those throughout the year. The goal is to try to get consumers to tell their own stories on Health IT and how Health IT can help them personally as individuals manage their own health and improve their own health and wellness. So, I'm not sure on this one where, you know, what area we will need input from you all on, it may be just sort of keeping you informed about what is going on and see how things develop, but it is, as Farzad said, an area of huge interest for us this year and so we need to think about how we might either keep you informed or get input from you all as we develop our program further.

Okay, strategies. So, you all know that we released our strategic plan, our Health IT Strategic Plan in September and by the time we released it some of it was already a little bit out of date because things move so quickly in our office and in the federal government, and in the private sector with respect to Health IT. So, while we are very proud of our strategic plan and we feel like it really provided a good framework for all the work we are doing and what we believe needs to happen in the next five years, we also don't want it to be stale. We want to figure out how we can best keep it fresh, keep it up-to-date and get public input throughout the process. We are looking at figuring out how we can iterate our strategic plan or at least sections of our strategic plan that we know have already changed or are already in flux in a more interactive and more transparent way.

So, we have been working with some folks to try to figure out how we can use social media to kind of iterate our plan, at least parts of our plan that we know of changed. So, for instance the consumer e-Health section, information exchange, and then Health IT safety in light of the IOM report and our rethinking on what we can do in that space. This is still something we are working on. We are looking for broad public input. We are hoping that by using some innovative tools we might be able to get broader input then we've gotten in the past and comments on our strategic plan, but also, we'd like to both keep you informed and get your input as we suggest some changes to particular sections of our plan.

Query Health, I'm not going to say too much here. We want to just continue to provide some updates and get your input on policy issues that may arise in the Query Health Project so that will just be an ongoing. And then lastly discussing more about how we can leverage Health IT for healthcare delivery reform. We talk about Health IT as a foundation for healthcare delivery reform having the data to support healthcare

delivery reform, providing the measurement to help providers move toward services that their consumers need and are looking for. And again, this is an area where we may want some of your thinking and input.

**Joshua M. Sharfstein – Department of Health & Mental Hygiene, Maryland**
Hi, this is Josh Sharfstein from Maryland. I think that is a great topic.

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**
Thank you. Okay, number five, so Health IT safety. Farzad already talked a little bit about this. In light of the IOM report that came out in November, we are spending a lot of time thinking about Health IT safety and working on developing a surveillance and action plan for HHS that is in response to the Institute of Medicine Report. We all believe that Health IT improves patient safety overall, but we want to make sure we understand whether and how this technology may introduce new risks just as every new technology comes with new challenges. We want to make sure that we are being proactive and deliberate, that we are getting the data we need to be able to understand where there may be some risks so that we can then take action if necessary or appropriate, or to take action to mitigate those risks.

So, like I said, we are working on a surveillance and action plan. We are having some conversations with folks in HHS that have a role to play and that were specifically identified in the report and we have been having some conversations with other stakeholders but this maybe an area where we would want some Policy Committee input.

We have been talking a little bit with the Certification Adoption Workgroup about anti-fraud and this is an area where we have had some discussions, but it's not clear whether this is just an area that we need to monitor and kind of keep the Certification Adoption Workgroup up-to-date or if there is anything that we really need to take action on in this space at this time. So far, there has not been a clear or obvious activity that the Certification Adoption Workgroup has been interested in exploring or an area where they have thought that there is something that the Policy Committee really needs to weigh in on. Larry, I don't know if you have any other thoughts to say generally on this?

**Larry Wolf – Kindred Healthcare – Senior Consulting Architect**
So, the only other thing I might add around that, and you've got some subsequent bullets I think that talk about some of this, but issues of what makes a legal EHR. So, sort of data integrity inside the chart and how do you know that this is what someone said, those kinds of questions, and does that effect any of the certification criteria? So, it might be more like a gap analysis where are things missing.

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**
So, that is something that we are still having a conversation about and is ongoing. Liability, this is an area that we have also talked, you know, just preliminarily with the Certification Adoption Workgroup last year about, but may be an area that we want to take on this year, identifying opportunities to limit liability concerns either real or perceived. There are some issues related to clinical decision support, contracting disclosures, providers managing large amounts of information and being able to use the information they need to make decisions, all of that. This is sort of an area that we are at least paying attention to and want to be considering with respect to how it may impact adoption and again, another area that we may what we want your input on.

With respect to priorities for standards development, the Policy Committee, we would love your input and your collaborative dialogue with the Standards Committee on areas for priority setting for standards development to help think through what those areas may be. We do have John Halamka coming to talk a little bit later today about their thinking of their work plan for this year coming up and so we want to make sure that we can kind of keep that dialogue going and so that you can weigh in on areas where you see that there may be priorities for standards development and make sure that we have that hand off with the Standards Committee so that those priorities are put on their radar.

So, one area I don't have up here, which I actually identified before we started this meeting and Farzad has now brought up, but is information exchange. And the reason it kind of fell off of my slide, not out of my mind, is that we're still having some internal conversations about where we might think there might be some opportunities for input from the Policy Committee in this space and how the information exchange workgroup might be able to help us with that. So, that is definitely an open issue and an area for continuing discussion that we may want to engage you all on.

And finally, last but not least, emerging issues. We are starting, at least from IM from our policy perspective thinking about kind of what's beyond the horizon and what kind of policy issues we should be thinking about now given new technologies that may be coming down the pike. We're also thinking about our ARRA program, which at some point the funding will run out and how we transition our work but maintain the important roles that those grant recipients have been taking on. So, sort of the things that coming down the pike, the emerging issues with those grant programs with some new issues like genomics and mHealth, etcetera.

The third one is an area that I have been interested in is thinking about how we usually talk about clinical decision support but decision support is not only helpful for clinicians, but could also be helpful for consumers and are there some synergies there with talking about clinical decision support and consumer decision support as we sort of expand our consumer e-health portfolio. Perhaps an area that we might want to provide updates is on our SHARP grants and innovations and whether or not there are some opportunities to be thinking how some of those projects are working, how they could fit in with some of our other activities and then, of course, the learning health care system which is our fifth goal on our strategic plan and again, sort of a forward-looking, you know, not the year of Meaningful Use but the way that the data that we have from Health IT and health information exchange can really improve the healthcare system and the learning environment.

So, that is all I have. I just wanted to put some ideas on the table to get discussions going about your thoughts on priorities for the Policy Committee agenda for the next year so that we can set up a nice plan for the entire year and think about, make sure that we are hitting the priorities that you feel are important and that we have a conversation to make sure that your priorities are supporting our goals and vice versa. So, I will now open it up for discussion.

**Paul Tang – Palo Alto Medical Foundation**
Thank you very much, Jodie and Josh. This group has been I think very thoughtful in distilling information and producing its recommendations and we do that by getting into some issue in particular depth. So, probably we won't be able to do everything with an equal amount of rigor. So, it would be important for us to prioritize what is the most useful input we can provide to ONC and CMS, and HHS. So, let me open that up for comments and our goal really is to I guess expand upon some of these issues, importantly prioritize some of these and the Workgroup chairs hopefully will go back and take a look at sort of what would fit in with the things that we end up with at the end of this session and get back to Jodi and me, and Dr. Farzad to sort of farm up a 2012 agenda for our policy discussions. So, I will just go around the table. David Lansky?

**David Lansky – Pacific Business Group on Health – President & CEO**
Thanks, Paul. Thanks, Jodi, it's really helpful to get this perspective and I'm testing it sort of against what I hear from my community, my constituency, which is in this case the purchaser community, and I realize in thinking about this that all the work everyone has done, especially the ONC staff isn't on the radar of the purchaser community. I don't think they are tuned into most of the things, the programmatic work we're all doing and so it makes me pause and wonder what should be on this list that you just summarized that would get their attention so to speak and what is the value proposition that this entire initiative is bringing to that set of stakeholders and of course many others.

And so I just wonder whether we should do some thinking about our value proposition and how we communicate that better to all the constituencies that we care about. And obviously, some of the things that are embedded here will produce high value to the participation community ultimately. So, part of it may be communication around that, but part of it may be just really testing ourselves and making sure

that as we get into the realistic weeds we have to tangle with, we're also keeping our eye on the highest value outputs of the Health IT supportive health system. And so that takes me to some of the elements, I guess, that I hope we will get some attention to this year.

I do think this integration of the decision support functionality with the other things we are doing is really important in that respect because it is a way of translating the infrastructure to value. And I think something, I think a phrase Farzad used earlier today, the architectural roadmap is an important piece of this. How do we have a sense to the larger community that where we will be in, not just through the ARRA funding, but in 5 years or 10 years will be a transformed healthcare system that delivers a new kind of value? And I think for that to be realized we have to do more work on HIE and architecture, and data integration platforms across the settings that is something we all are very conscious of, but I think we've just not given as much attention too in this last year and we need to give more attention too in the work plan going forward.

**Paul Tang – Palo Alto Medical Foundation**
Thank you. Charles?

**Charles Kennedy, MD – CEO Accountable Care Solutions - Aetna**
Yeah, you know, my comments are also along those lines. I'll give two areas; one comes from a personal story. I had a relative be admitted to the hospital and the hospital was meaningful use certified and I was expecting this wonderful moment where my policy work was going to marry up with this personal issue and show me that here is an eCopy of their discharge summary that I was going to share with them and when the eCopy of that discharge summary came, they couldn't make sense out of it and they gave it to me and quite frankly neither could I. So, it was a little humbling. But one of the things I'd like us to consider is focusing on usability. Usability of, for instance all these metrics that we have about the number of organizations that are meeting the requirements, I think there is another level of okay, but can those requirements drive a change of action which creates the result? So the whole notion of usability I think is important.

The second area I think would be important would be you have a section in here healthcare delivery reform and I think under that there is an important area of the intersection between ACOs and health information technology and what we're hearing from the field is most of the delivery systems we speak to say the technology that is available out there does not help me be a successful ACO and I think that is an important area for us to investigate and to think about how we can, you know, help these delivery systems go down that conversion process more smoothly and more efficiently.

**Paul Tang – Palo Alto Medical Foundation**
Good, excellent. Larry?

**Larry Wolf – Kindred Healthcare – Senior Consulting Architect**
So, this is really great time to have both an overview and some time to discuss it and I'm glad to hear that we get to think about it and come back next month and see where we landed on all of this. A self-interest big thank you for engaging non- eligible providers, you know, care happens in many, many care settings and if we really are looking at coordinating care and looking to make this patient centric we've got to look at all the places someone gets care and how do we support them in all those settings. So, I'm thrilled that is on the table. Also, there is stuff coming up on standards that we are going to hear about later today and there is some great work that S&I Framework is doing sort of looking broadly at, if we are doing care transitions, let's look at the broad sense of care transitions even the radical sense that longitudinal record might actually mean the lifetime of a patient not the lifetime of a single episode of care. So, you know, I think that there's really some very good discussions happening on that already.

I like the notions of exploring ways to get the word out. Some of the things you're doing with social media I think is a great way, you know, is there a way to get more input in what we're doing. I brought in a prop that is sitting down at the other end of the table maybe someone can grab it, of a graphic novel comic book on healthcare reform and maybe we need one of those on HITECH and all the things

that ONC is doing and sort of get out of our, you know, there's some value in some of the older ways of informal communication that we can maybe leverage and maybe it would be fun as well. Thanks.

**Paul Tang – Palo Alto Medical Foundation**
Thanks. Neil?

**Neil Calman – The Institute for Family Health – President and Cofounder**
So, I would just like to put in a plug for us spending some time on the consumer e-Health piece because I think it's new enough and we really haven't spent a lot of time on it and I think we need to learn more about it because it's sort of part of the human workflow of how people are going to interact with information and I think that's critical. And the other piece I think we need to really think about, and I guess it goes maybe one step beyond what Charles was saying about usability, is sort of really beginning to talk about the integration of IT into workflow, because I think we're producing lots of product and capabilities, but if we don't begin to share something about practices about how people incorporate this stuff into workflow, I think, you know, once the Meaningful Use dollars sort of go away, people are going to retract into their prior position of, you know, using the system to do what they absolutely need to do because the other things will not have become part of the natural flow of their work. And I think we underestimate always the importance of understanding what a provider's work life is like and how the tools fit into their workflow. So, maybe we can include that in the usability piece, but I was thinking, you know, since we've done some work on usability, I would think of the people who sit around watching the videos and how many clicks people make as sort of the usability part of it, but the workflow I think is more critical even in that.

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**
Can I just ask Neil, when you talked about focus on the consumer e-health portfolio is there anything in particular that you felt was critical or you just want to kind of know more and then figure out where to focus?

**Neil Calman – The Institute for Family Health – President and Cofounder**
Yeah, and I think because we want the stuff that we're doing to integrate with what's happening in the marketplace around, you know, consumer facing applications and to think about whether or not there is some integration of the electronic health record. I mean, so the first thing that comes to mind is that EHRs are still pretty much provider owned and based and I'm nervous about that because what we've learned in New York about the exchanges and looking at the crossover of where people get care is people are getting care in so many different places that, you know, expecting that sort of the provider owned EHR is going to become the place that people communicate, so I guess, I'm thinking of it as, you know, patient entered and patient provided information into the electronic health record as one very small piece of a much larger question of how people are going to interact with their own information in a broader sense and how it's going to be consolidated.

And so, maybe one of those discussions is whether or not exchanges become the major source of the patient's interactions so that there are ways of people consolidating information from multiple sources. I just think there's a lot of questions about that, that we should have an opportunity to think about and discuss.

**Paul Tang – Palo Alto Medical Foundation**
Okay, thank you. Dr. Agarwal?

**Madhulika Agarwal – Veterans Administration**
Just a very quick follow on to her plug for consumer health, and I think just going a little bit further than that, you know, mobile applications, there was just a point above, VA along with the Department of Defense has launched a mobile app for posttraumatic disorder, PTSD, which has actually been circulated in I think 55 countries with over 30,000 downloads. So, this allows the consumers to sort of manage their symptoms and have the resources on hand. It's I think going to be a bursting, exploding area as we start

to talk more and more about, you know, self-management and chronic illnesses. So, I think it is a very important topic.

**Paul Tang – Palo Alto Medical Foundation**
Okay. Wes?

**Wes Perich– Centers for Medicare & Medicaid Services**
Yes. First, I want to say thank you Jodi and Josh, I found this very informative, I appreciate that. First, one quick question and excuse me if I missed this, but do you have a target date for the governance ANPRM?

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**
I said we're shooting for the first quarter of this year.

**Wes Perich– Centers for Medicare & Medicaid Services**
Okay, so some time before the end of March?

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**
Yes.

**Wes Perich– Centers for Medicare & Medicaid Services**
Thank you. And under the continuing discussion piece you had as one of your items anti-fraud and based on my notes I think you were looking at maybe issues of what makes a legal EHR. I wonder if any thought has been given to actually using Health IT as an anti-fraud tool for example Medicare and Medicaid payments? Would that be appropriate for your group?

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**
So, yeah, we've been having conversations with OIG and CMS and we haven't quite figured out, you know, a path there. I mean there is definitely an interest. And so IT actually has a couple studies right now looking at EHRs and fraud and we're kind of waiting to see what results they have from that. So, it's something we've talked about but it's not something where there seems to be an obvious approach that we want to sort of pursue or follow. So, at this point we've just been having continuing conversations with IG and CMS to understand what their thinking is and, you know, what their work is and if there are any intersections.

**M**
I would say the possibility of using electronic health records to prevent the commission of fraud either advertent or invertent I think is something that this committee should certainly be looking at, to not only look at this as a risk but also as an opportunity if that's what you're getting at.

**Wes Perich– Centers for Medicare & Medicaid Services**
That's exactly the point.

**M**
It is certainly something that I think the committee should be…

**Wes Perich– Centers for Medicare & Medicaid Services**
We'd appreciate that if you would keep that as the continuing, you know, keep it on someone's radar screen there, thank you.

**M**
So, jumping in as comment on that, to expand a little bit on what Jodi was saying, what we are hearing from OIG and the other investigators is they don't have specifics to give us of where they're seeing EHRs

as part of a fraudulent billing process or other fraudulent activity. So, it was all speculative about what was or wasn't contributing to potential fraud, and rather than spend a lot of time in speculation we said as you find things please bring them to us.

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**
I think it might be an area where we should kind of keep it on the agenda and as, you know, kind of see regular, particularly with our Certification Adoption Workgroup, periodic check in's with IG and CMS to see if anything is emerging, but except for, you know, as Larry said the legal EHR, there wasn't data suggesting this is an area that we should be thinking about or targeting yet. And, like I said, the IG does have some investigations underway right now, so it maybe that they uncover some information that might help us think about this differently.

**M**
And this could be down the road. I don't know if, and as I say, this could be years away, but in terms of the more data you have ready access to the greater the interoperability and the exchanges might help in areas like predictive modeling.

**Paul Tang – Palo Alto Medical Foundation**
Thank you. Connie?

**Connie White-Delaney – University of Minnesota/School of Nursing – Dean**
Thank you Paul. Connie Delaney. I particularly want to encourage our consideration of workflow usability and also the non-eligible providers. I think they push the boundaries of where we have been and significantly impact the results that we are intending for the healthcare for people. Second, I would encourage us to, along the information exchange pathway to make that a high priority. I'm thinking there could be some currently unrealized synergy between the CTSA work and the governance work that is going on there and establishment of what are namely research data sets, but in fact those data sets tend to be full clinical data sets that I believe could relate to this work. And then third, I would encourage, at least from my view, that we have less emphasis on the IT workforce. And the reason I'm suggesting that is that there are so many other entities now that are on-board and really moving that agenda and given the plethora of calls for focus of our group if I was dropping one it be that one. Thank you.

**Paul Tang – Palo Alto Medical Foundation**
Thanks. Paul?

**Paul Egerman – Businessman/Entrepreneur**
Thank you and excellent presentation. Interesting what Connie just said because I was actually going to ask about the Health IT workforce also and I was curious how do you define that? So, what is included when you talk about Health IT workforce? Does it include nurses, physicians? Does it include just the technical people or the vendors?

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**
I think in the way that our grants and our program is focused it is on the technical folks, it's the folks that are helping providers to adopt and implement. It's not the end-users.

**Paul Egerman – Businessman/Entrepreneur**
Okay and then what role do you see the government playing in that workforce area?

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**
So, I am not expert in our work in this space, but so far we've been developing curricula, we've been working with community colleges to develop Health IT certification programs and university-based programs. So we've been sort of working on the side of working with educational institutions to develop the skills and certificate programs to provide the folks with the knowledge and the capabilities to provide

those services to providers who are trying to adopt and implement Health IT. Do you have anything more to say as far as that?

**Doug Fridsma, MD, PhD, FACMI – Office of the National Coordinator – Director Office of Standards & Interoperability**

Yeah, you know, there is a school of thought that says that if there are jobs people will find the jobs and will get the training they need to get them. There are others who feel that in this transition period doing what we can to accelerate the creation of a Health IT workforce to meet the rising demand is something for which there is an appropriate government role. In pursuit of that we've done things like, you know, contract for the development of a competency exam that people can voluntarily take and those who are interested in hiring could potentially use that just went through a process on that. We've helped develop a curriculum that many educational institutions are downloading and using. I think we've had 120,000 units downloaded; only about 10% of them from the community colleges who were the ones that we really started off thinking were going to be the main users for it in many countries actually.

So, there's a curriculum development piece there's a competency exam piece, but I think the other area is around professionalism. Is going to various places in the medical, nursing, clinical education pathway from medical schools and nursing schools to residency programs, to board exams, to means of certification and specialty boards to say is there a part of appropriate Meaningful Use of Health IT in pursuit of quality improvement that it should be, is becoming a core part of what it means to be a modern nurse or physician and can we help make the connection to those professional standards around Health IT competency and use of Health IT. So, that's I think the two parts of the workforce issue, in my view is one, how do we create a specific workforce for, you know, EHR implementation and so forth and informatics capabilities bringing those with an IT capability to health and bringing those in health to an IT capability.

There is a second which says everybody who is a physician is going to have to know something about how to use Health IT in the pursuit of better patient care and population management. So, I think those are the two parts of this. Now what is going to be the enduring government role, I don't know and I think that is a legitimate issue for the Policy Committee to consider.

**Paul Egerman – Businessman/Entrepreneur**

And so that's very helpful to understand the two parts, because, you know, if it was just narrow only the technology piece, I mean that's interesting but to me it's not enough. If you go to that second part where you were talking about, you know, training and what goes on in medical schools, and what goes in terms of training nurses, I think all of that is a very interesting to do to sort of like integrate the Meaningful Use concept into that entire process. So, to me that is exciting work. If you don't mind, one other comment or question. We talked about.

**Doug Fridsma, MD, PhD, FACMI – Office of the National Coordinator – Director Office of Standards & Interoperability**

If anybody listening would like to do a project with ONC on that, please contact Jodi Daniel or me.

**Paul Egerman – Businessman/Entrepreneur**

Well and it's great; because it seems to me like it's almost in every area of endeavor we always have this concern that the training and the universities are behind the curve in terms of behind what's really needed in the real world. And so to sort of reach across there I think is exciting. The other question I had, Jodi, is in terms of the grants expiring, is it seems to me going forward in 2012, I understand what is going to happen with these HIE organizations going forward, and especially what is the business model. So, you know, how are they going to operate independently? What are their plans for doing that? Understanding that, it could be helpful for also understanding what the future policy should be for health information exchange.

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**
And that seems to be consistent with Deven's suggestion of getting some more updates on the HIE Program progress and maybe we can even get some input from Claudia Williams who is running that program, but also maybe some of the HIEs that are grant recipients who can provide insight. So, why don't we at least start with thinking about doing some program updates on that and then figuring out where we go from there.

**Paul Tang – Palo Alto Medical Foundation**
Thank you and finally, Marc?

**Marc Probst – Intermountain Healthcare**
Okay, thanks, and I could go on for a long monolog but I won't. Kind of cutting across, and this is great, really great, thank you, outcomes and consequences. We're starting to get some good data and there's got to be a set of kind of possible outcomes that we're looking for and desired outcomes and what we're actually seeing, it would be nice to start to formalize that and look at it. And then I think consequences is pretty important because there are consequences to the decisions of policies we are putting out, not just uniquely but in the whole scheme of what's happening in healthcare and it would be nice to just look at those specifically and that would impact the policies as we move forward.

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**
Thank you.

**Paul Tang – Palo Alto Medical Foundation**
Good point. Art? We only have a couple of minutes.

**Arthur Davidson – Denver Public Health Department**
Yeah, one last point. I thank you Jodi for including this point here about engaging non-eligible professionals, behavioral health, long-term care, nurses. I would like to add as well public health officials and the organizations as well, because as I think one of the earlier comments about ACOs having difficulty creating the environment with the data flow properly to create those measures, public health departments also have that need to create definition measures.

**Paul Tang – Palo Alto Medical Foundation**
Great. Christine?

**Christine Bechtel – National Partnership for Women & Families**
Very, quick Paul, don't worry. So, this is Christine Bechtel. I just want to say, Jodi I think this is really helpful, but I do want to echo Paul's comment and Marc's comment about priorities and goals, and I'm thinking that one, perhaps more simplified way to do that might be to be reminded of ONC goals from the strategic plan and then to buttress those against and use potentially as an organizing framework for our work plan for the coming year, but I do think there are some areas that are more urgent than others and it would be helpful to have you all's perspective on where you need the most input and where we can be most impactful. I'm thinking of course Meaningful Use, but certainly information exchange and consumer e-Health being some areas with great potential where I think our role could facilitate achieving the strategic plan and goals.

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**
Thank you.

**Paul Tang – Palo Alto Medical Foundation**
Very important comment. Thank you. So, this has been a great discussion. Total engagement from the committee members. Our next meeting is only in three weeks because we gave people a little bit of buy to catch up with the New Year. So, if the chairs of the Workgroup or anyone would give us or send into

Jodi and me your topics, your high-priority topics and a few bullets of the major issues you would like the committee to work on than we'll try to distill that and come back with something to present back at the February meeting to sort of re-endorse kind of our priorities for 2012. How does that sound?

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**
That sounds great and we could just set up a time for us to talk and try to work through that. That would be great.

**Paul Tang – Palo Alto Medical Foundation**
Correct. And so could we give ourselves the one-week deadline for that? I mean everything happened at the last minute, sort of like Meaningful Use, so it's not going to happen, it's either going to happen or it's not. So, one week seems reasonable from today, because then we'll get a little time to synthesize and put it together to reflect back to you.

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**
Thank you.

**Paul Tang – Palo Alto Medical Foundation**
Thanks again Jodi especially and Josh. And then John are you on the line?

**John Halamka, MD, MS – Harvard Medical School**
I am indeed and since you guys have already gone through a clear set of priorities my presentation will actually be quite quick.

**Paul Tang – Palo Alto Medical Foundation**
Good.

**John Halamka, MD, MS – Harvard Medical School**
So, are you ready for me?

**Paul Tang – Palo Alto Medical Foundation**
We are. Go ahead.

**John Halamka, MD, MS – Harvard Medical School**
Very good. So, you should have two handouts, one is a PDF of a blog post I did reflecting on the year ahead providing some narrative detail as to what I see as some of the standard's challenges. And then we have a PowerPoint presentation and so if there is someone in the room who could take us to the first slide labeled quarter one.

**Paul Tang – Palo Alto Medical Foundation**
We're there.

**John Halamka, MD, MS – Harvard Medical School**
Very good. So, when we look at January, February, March, as we just heard on the last presentation we anticipate that the NPRMs will come out and that there will be commentary and reaction and so just as you are poised to react to that commentary and reflect what changes might be made to regulatory language so will the Standards Committee and so we await the release of the Stage 2 regulations.

You've had a discussion this morning about quality measurement and I think you'll be talking further this afternoon, quality measurement can mean so many things, we already have worked on quality standards for vocabularies so that as a laboratory, a problem, an allergy is used to compute a numerator and denominator there is clear vocabulary so that across different EHRs measurements can be apples to apples. But, I think as the Policy Committee is stating and ONC has stated, quality measures are very dynamic. It is unlikely that we will ever be done with the canonical list of quality measures that will

measure everything for everyone perfectly. In fact, we probably need to get away from the notion of a fixed set of quality measures and develop the capacity to have a query language by which an e-measure can be defined ad hoc and run against an electronic health record or a registry of electronic health record data. And so we need to think through what standards would be required for future quality measures that would be generated, would be created and destroyed, would be different year to year without requiring a code change to the EHR itself. I think we are going to be aligned on a policy and standards vision to take us to this new quality measurement future.

NwHIN exchange and the NwHIN connect software has been around for many years and we have, at the Standards Committee, looked at where it is strong and where it can be improved, and we have recently posted a number of blog documents seeking input from implementers of NwHIN exchange and asking how can it be made easier? How can it be made more scalable so that it doesn't require such resources to put up an instance of NwHIN connect and ensure that the kind of pull transactions that are done among communities with a master patient index and record of locator service can be easier to deploy. There are a couple of areas of NwHIN exchange specifications that are a bit complicated. And, so we will be targeting areas of building simplicity and incorporating newly involving standards.

And then vocabularies, code sets very important. As we think about standards in general, I've always described the three areas as content, what is the document or message you're exchanging? Vocabulary, how do you describe the specific entities, problems, meds, allergies, labs that exist in that content and then how does one transport a content from point A to point B? The idea that we would have a single resource hosted by the National Library of Medicine that provides the necessary code sets and value sets and vocabularies with their mappings and crosswalks supporting Meaningful Use Stage 2 and beyond will make implementers joyful.

Instead of having to license content from multiple places or download it from multiple places, or try to figure out how to map one vocabulary to another and do it in a different way at every EHR or site, one common place to download or even if not only download have a mechanism of programmatically calling web resources so that you would be able to develop the right vocabulary terms to insert into the EHR during the course of delivering care. So there will be a lot of questions that we look at, what are the tools and the technologies for these downloads, are they more problematic web services, how do we ensure the vocabulary and code sets needed for Meaningful Use are supported? So, just as we did our summer camp in a compressed timeframe we do all of that in January, February and March.

We move onto quarter two, we recognize that health care information exchange does require not only transport standards but supporting components. One supporting component for example is that provider directory of how is it that I discover a provider's affiliation, how to electronically reach that provider and there may be some other interesting demographics about a provider that would be useful to ensure I'm getting to the right provider at the right location at the right time. So, the standards for those supporting components have very much been an evolution and as we looked last year at the state of the art there was not a clear set of winners in the provider directory standards. So, we want to do some pilots, we want to further refine implementation guidance so that we can get to common provider directories across the country.

I heard Jodi mention Query Health. The idea that we're sending questions to the data instead of centralizing the data and certainly we will review all the work of the Query Health activities. Image standards, now Paul as a physician you can appreciate the importance of being able to send data from an outside imaging facility or a referring physician to a hospital back-and-forth to reduce redundancy and waste. And here is a personal example for the Policy Committee; my wife was recently diagnosed with breast cancer. She went to an outside facility and had to take her mammogram on a CD and drive it 20 miles from the outside facility to Beth Israel Deaconess Medical Center. It is so important to this country and to me that we can eliminate the sneakernet and that we transmit images seamlessly from the point at which the patient is imaged to the point of use across multiple institutions without involving CDs. There are good standards but we need to ensure that they are incorporated into Meaningful Use and that those standards are constrained so that each implementation of those standards is interoperable across all

vendors of imaging equipment, PAC systems and other viewers, some of the web-based cloud viewers that are evolving.

And governance. How do we ensure that as our standards development organizations set their priorities that the S&I Framework, the HIT Standards Committee, and the SDOs are all aligned with some common decision-making reducing redundancy in standards making activities and ensuring alignment of priorities? And we will do all of that that I described in quarter two. So, April, May, June.

Now let's move onto July, August, September and just as ONC has been the office of no Christmas of course it's the office of no summer and we've always worked across the summer. Across the summer timeframe we see ourselves working on detailed clinical models. You may hear in the technical literature these being called reference information models, archetypes, they are called many different things, but here's the problem. So, Paul, you are running Epic. Epic has an allergy. An allergy has a name, it may have an active or inactive indicator, an onset date, it may even have such a thing a reaction such as did you develop a rash or did you develop shortness of breath. I happen to have a home built system, our allergies here include such things as I've just described but also who observed and reported the initial allergy, what is the credibility of that allergy, is it your mom thinking you had a rash when you were 2 or a nurse who gave you a tablet and saw you nearly anaphylax? The problem is that each of us describes an allergy differently and may have different data elements or fields quite different. So, as we then think of health information exchange and actually incorporating data between EHRs wouldn't it be great if we could come up with a concept, allergy has 5 different certain pieces of information associated with it that are important and although each vendor may implement them completely differently, at least the information models are consistent. So we would like to start leveraging the fine work that has been done by many organizations over the years and this whole concept of modeling medical concepts so there can be similarity across different systems.

I heard already this discussion of consumer mediated healthcare information exchange and that's one of course of my favorite ways to exchange information, rather than think about provider to provider or provider to central repository or registry let's give all the data to the patient and then enable the patient to route data as is appropriate and respectful of their privacy preferences. How do we enable that in an ecosystem of healthcare information exchange?

We've talked about vocabulary resources being centralized, but also wouldn't it be wonderful if every implementer, every vendor, every hospital could download their standards implementation guides, examples of standards, sample data sets, conformance testing tools from one site rather than having to go to HL7 for this and HIE for that. The problem we had in HITSP was one I have called indirection; we publish a guide which refers to another guide, which refers to another guide and that became very, very challenging for implementers. So we want to get away from that.

And green CDA. We talk about the CCR or the CCD, one issue about it has been that it requires a fair amount of technical knowledge to create a CCD or a C32 document. What if we used more plain English within the standard itself? So, that instead of calling a problem list 180-2-3.47 you called it "problem list." That would be a whole lot easier for coders, especially those without domain expertise in the HL7 CDA or the RIM to code up interoperable documents. So, we will look at some new approaches for cleaning up those standards.

And finally, quarter four. We heard a little bit, in this morning's discussion, that someday ARRA will end and some day the grant programs will end. Well what is the maintenance strategy? Who will maintain and improve and enhance the standards when grant funding runs out and some of the wonderful work that is being done at ONC, the S&I Framework will that continue forever? Will that be given back to SDOs, what is the strategy to ensure a long-term future for all the standards I've discussed?

We talk about public health standards. Of course there are already very good public health standards in Meaningful Use Stage 1 and presumably in Stage 2 has been recommended. But there are some interesting novel approaches. The CDC with BioSense 2.0 has created in the Amazon cloud a secure capacity for states to hold repositories of syndromic surveillance data that will enable across state data

mining of syndromic surveillance information in a standards-based fashion. So, as new approaches to support public health evolve let's make sure the standards are there to support and protect them.

One issue that I haven't heard much discussed in the Policy Committee, but Paul please correct me if I'm wrong, is the issue of I've decided I don't like vendor A anymore and I want to go to vendor B and I want to take all my data with me and shouldn't it be a simple export/import process. How do we look at the standards for EHR portability across products when a patient leaves one practice and goes to another or a physician goes from one vendor to another?

And then finally, as we continue our standards journey we know there are going to need to be tools that help with certification and conformance testing that test interoperability for healthcare information exchanges, let's make sure we have all those testing tools ready to ensure our infrastructure is as robust and reliable as it can be. And that is quarter four. Our winter plan. So, I hope quarters 1, 2, 3 and 4 align with much of what you've described today and in listening to Jodi's remarks I think they do and I welcome your questions and comments.

**Paul Tang – Palo Alto Medical Foundation**
Wonderful, John, it's a very, very clear presentation, so thank you so much for that. It sounds like the group is so productive that we would be tempted to throw more over the wall in this coming year. Are you going to be around for the quality measure discussion right after lunch?

**John Halamka, MD, MS – Harvard Medical School**
Unfortunately, I cannot be, but many people have briefed me on some of those contents and so I will follow up to make sure that they are incorporated in our future work.

**Paul Tang – Palo Alto Medical Foundation**
Okay, I mean does it sound okay to you?

**John Halamka, MD, MS – Harvard Medical School**
It does.

**Paul Tang – Palo Alto Medical Foundation**
Good. Okay we have some comments. Do you still have time John?

**John Halamka, MD, MS – Harvard Medical School**
I do.

**Paul Tang – Palo Alto Medical Foundation**
Great, thanks. First, David Lansky?

**David Lansky – Pacific Business Group on Health – President & CEO**
Thanks, John, it was a great report and fascinating list of valuable work. I just wanted to drill down on two of them and specifically about what you think the timeframes are for deliverables? On the provider directory specifications I know sort of in California we're spending a lot of time trying to get something going. When do you think there will be something of a consensus nature that states could begin to use to deploy in their HIEs that would assure interstate or interdirectory compatibility in the specs?

**John Halamka, MD, MS – Harvard Medical School**
Right, so you have highlighted such an important issue to me. Today we have said, oh there are products from IHE, the HPD specifications, but they are not widely deployed. There are other ideas that have been put forward such as use what Google and Amazon, and Facebook do to mark up pages with person identified information a web search capability using microdata and then there are some novel, evolving possibilities just using some web services. Last week I ran a forum of a number of major vendors of EHRs and I asked them their opinion. Do you see in your product roadmap a single approach to the provider directory problem? And I'll tell you that the vendors said please go invent something and let's all just use it. And so to be honest with you, David, I have a feeling that what we may end up finding

is that the S&I Framework folks working with the HIT Standards Committee and the Policy Committee will actually have to invent something that we will all use. So, I would certainly hope that would be complete by the end of 2012. But, I'm just looking at the marketplace right now and I'm not seeing something we can just lift off the shelf and declare by the end of quarter two is done.

**David Lansky – Pacific Business Group on Health – President & CEO**
Okay, thanks, that's real helpful. And then the second question is about, you had this provocative phrase in your blog version on the quality measurement standards that there needs to be simply query language created so the new quality measures can be designed without having to write new code and do you anticipate in the first quarter that the Standards Committee will make a dent on that or is that really sort of a scoping statement for a longer-term work plan? Obviously, I think and both Paul and I have advocated that we move towards some kind of a platform model where quality measures could be downloaded and not have to require hard coding. What do you think the timeframe for moving in that direction will be?

**John Halamka, MD, MS – Harvard Medical School**
I would guess what the Standards Committee will do as you suggest, they will take that statement and break it into a work plan and we've already worked on the vocabulary, but now how do we work on the query response that would be necessary for such an approach. So, I do think it's probably a longer term body of work broken down into several subcomponents of which some will get done in 2012 but it is a major, major effort.

**David Lansky – Pacific Business Group on Health – President & CEO**
Thanks.

**Paul Tang – Palo Alto Medical Foundation**
Thank you. Christine?

**Christine Bechtel – National Partnership for Women & Families**
Hi, John its Christine Bechtel. Thanks so much for a terrific presentation. As always you're very clear and specific and I appreciate that. This is quite a challenge of work and you're covering a lot of issues that we're really struggling with, so I appreciate that. I almost feel like the Policy Committee ought to be sending the Standards Committee like a case of Red Bull every quarter. I mean, good gracious. So, I just have two things, one very quickly. I like the approach you described about quality measurement and would just suggest, that if you aren't already aware of it, take a look at the MAP, the Measures Application Partnership issued a report about a month ago from the Clinician Workgroup that talked about quality data model and I just want to make sure that we start to connect those dots a bit.

The second thing is a question that I have around consumer mediated information exchange. I mean, I loved your comment about the sneakernet, but when I hear consumer mediated information exchange I do start to get worried that really what we are doing is saying "okay here's your data and you can choose what to do with it" but sometimes that really operationally means you figure out how to solve this problem that nobody else has been able to solve since the history of time, about how to get it electronically to another provider. Is there sort of a two second explanation that might help me understand that?

**John Halamka, MD, MS – Harvard Medical School**
Well, absolutely. So, today we have Microsoft HealthVault as a vendor provided container that is capable of receiving direct messages from any data source that wishes to send into a person's personal health record. It becomes a patient controlled health record. So, here is a vision, I John Halamka have a primary care doctor who is actually using GE's product and they're in the suburbs. Instead of trying to send that data to Beth Israel Deaconess Medical Center that primary care provider sends it to Microsoft HealthVault. Then, I can, in Microsoft HealthVault, using the direct protocol, say you know, I'd like to actually send these lab results to the hospital where I'm going to go get and imaging study later today. So, that there are products that are not going to require, as you suggest, you know, did the patient invent a workflow process. They are standards-based, they leverage direct and the patient then simply becomes the mediator of connecting various providers and keeping patient privacy preferences respected.

**Christine Bechtel – National Partnership for Women & Families**
John, that's really helpful. Thank you and I would just add that one thing that would be helpful as you go about that kind of work is for the Standards Committee to actually take a look at the work around Meaningful Use and make sure that the capabilities that we've have suggested for Stage 2, particularly of course around view and download, you know, is that really sufficient to enable the kind of model that you're talking about in practice. I mean, you're really describing the ability to do that from sort of a data mobility perspective, but I want to know in practice that if I have HealthVault and I can get information from one provider, what can we do in Meaningful Use to make sure I can get it to another provider without, as you say, having to create a new workflow. So, I think it will be helpful to have you guys look at the policy stuff and give us some feedback about how that interacts with this standards-based technical approach. Thank you.

**John Halamka, MD, MS – Harvard Medical School**
Sure, well absolutely, and just to your comment is that today I can for many EHRs get a continuity of care document and that may be provided to me on a piece of media. I then upload this to HealthVault and can share it out from there. So, it is consistent with this trajectory that we're on to get to the view and download along the way. I think it's very wise to start there anyway.

**Paul Tang – Palo Alto Medical Foundation**
Thanks. Larry?

**Larry Wolf – Kindred Healthcare – Senior Consulting Architect**
So, great work and I looked at your Q1 goals and thought if you really succeed in that you should take the rest of the year off, but then you elaborated on the rest of the year and I saw how those were all extended. So, that makes a lot more sense to me. I think that your focus on the various aspects of getting the data right, the detailed clinical models, quality measures, query language is sort of all of a set and actually move us towards the vision that I think a lot of people have. You could imbed decision support in there whether it's for clinicians or consumers. If you don't have good granular data and it doesn't move between applications we are not going to achieve the things that we really want to achieve. So, great to see that moving forward.

I did have some questions that maybe you can help on educating the world as you move forward on this. A lot of people seem to have sort of finally latched on that there is this thing called CCD and they may not know what it really does or what it contains or how to build it, or any of that stuff, but they sort of are using that as that is the thing we need to move and they'll learn what it takes to do that and run into some of the things you describe in terms of complexity of the implementation guides and even complexity of the messages and the documents themselves. But, I sort of feel like we are now entering this new era of consolidated CDA, templated CDA, green CDA, CCD plus. I don't know how many other phrases I have seen out there. So, it would be helpful if you sort of could give us some guidance as you guys do your work on how the document standards themselves are evolving and give us a handle on keeping the language around that clean.

**John Halamka, MD, MS – Harvard Medical School**
Sure, and I would be happy to do that. Here's your 30 second overview. CCD was invented first, it was then constrained into the C32, it was then cleaned up and refined into the consolidated CDA, and now it is going to be simplified into the template green CDA. There you go.

**Larry Wolf – Kindred Healthcare – Senior Consulting Architect**
Okay.

**M**
We should turn that into a YouTube Video that would be great.

**Paul Tang – Palo Alto Medical Foundation**
All right, thank you. Judy?

**Judy Faulkner – EPIC Systems Corporation**
Yeah, Hi John. This is Judy.

**John Halamka, MD, MS – Harvard Medical School**
Hello.

**Judy Faulkner – EPIC Systems Corporation**
I just have a few comments on the consumer mediated health information exchange. I think the idea of having it as an adjunct to the EMR is good. I am thinking about a couple of different circumstances that might make it difficult if that is the whole source of information, one is for those who are poor and unable to afford their own computers to keep this information, what do they do? Two, in emergencies what happens in an auto accident where a person does not have their information and goes to a nearby emergency department and how is their information accessed? And three, the intermediary that would keep that patient's data, what is the way that they will gain revenue and how do we prevent the information from being sold as the way of getting revenue, even if it's not sold one of the things that I've talked to some of the folks about who you've mentioned are if you don't sell the data, but if you put out an agreement with the patient that in it the patient gives permission to sell the data is that legitimate or not do you think and they said "yes" and so my concern is that sometimes those agreements are very difficult to understand. Where will we be inadvertently moving into either you pay for it or the data is sold? So those are three of the things I think that your organization might want to address as you deal with the consumer side there.

**John Halamka, MD, MS – Harvard Medical School**
Well, absolutely, and just to clarify my statement, I absolutely believe we do need provider to provider exchange, provider to public health, these various models of pull and push, but I also want to make sure the consumer exchange is supported because there are many patients who will want to be the steward of their own data, it is complementary.

**Judy Faulkner – EPIC Systems Corporation**
Okay. Thank you.

**Paul Tang – Palo Alto Medical Foundation**
Any other questions or comments? Well, John, we are very appreciative of your taking the time to illuminate us about the plans for 2012 for the HIT Standards Committee and thank you so much for your good work and the work of the committee and we will plan to keep in touch throughout the year.

**John Halamka, MD, MS – Harvard Medical School**
Very good. Well enjoy your lunch and of course I'm here to serve and look forward to the next year together.

**Paul Tang – Palo Alto Medical Foundation**
Thanks, John. Okay, that brings us to lunch. And we have until 1:15. So we will see you back here at 1:15. Thank you.

I think it was more relaxing to have a hour, certainly more than a half hour and even 45 minutes, but anyway, well welcome back and I think we are going to continue the theme of Meaningful Use and concentrate a lot on quality measures which as you know is really an important part of the whole HITECH strategy Meaningful Use and is the underpinning for a lot of the CMS programs in health reform. So, let's see here, we'll remind you of who is on the Meaningful Use Workgroup currently. And in this session we are going to start off with a timeline, the anticipated timeline for Meaningful Use 3 development and talk about our initial recommendations having to do with clinical quality measures and the real reason we want to bring it to your attention today is so that we can get some approved recommendations to go onto HIT Standards Committee, because as you heard this morning there is a lot of work to be done both in the quality measures as well as things that impact the actual EHR and HIT system, and finish with discussion by this group.

So, to remind you in November we updated you on a hearing we had on October 5th where we heard from the field about their early experience with Meaningful Use and some of their hopes and desires for Stage 3 and some of their counsel. We talked a lot about some of the feedback; specifically at the top of their list was feedback about clinical quality measures and the challenges, which is why we concentrated our attention on that in a big way. Then later that month, the Secretary announced her intent to delay Stage 2 for the early adopters to 2014. As you recall that was our recommendation to her and she was just signaling that that was their intent. So, if we do a little math, if the earliest adopters would not be going into Stage 2 until 2014, and sort of the cadence has been every two years from stage to stage, then not knowing anything about the NPRM or certainly the final rule, one might think that there is probably going to be, I mean one would anticipate there would be a two year lead time between Stage 2 and Stage 3 and that would mean that our recommendations to the Secretary would be in the mid 2013 to the 18 month lead time that the industry and providers asked of us and the one year sort of approval process for rulemaking.

So, that is how we get to approximately when our drop dead date is for delivering our recommendations back to ONC, CMS and HHS. So, in addition we wanted to give lead time, as you know, we work with HIT Standards Committee so we lay out some policy recommendations and then there is always an accompanying standards recommendation. So, we sort of back that up from mid 2013 to say for the policy recommendations about Meaningful Use that have an impact on standards or standards have an impact on that then we'd like to get those recommendations to HIT Standards Committee at least by the end of this year if not earlier. For those that are just policy then we can go as late as the middle of 2013.

So, today what we are doing is we're presenting to you some initial recommendations that we would like to get approval to move on to Standards Committee so they could work on the things related to quality measures, because in addition to the lead time for developing the systems and implementing them there is a lead time in developing quality measures. So, that is why we are trying to get this out to them as quickly as possible and the plan is then to have a joint workshop between members of HIT Policy, HIT Standards, ONC, CMS and other stakeholders in this quality measure supply chain. It just goes all the way from defining what the clinical guidelines are through how do we measure how well we are doing to how do we improve the actual care delivery. So, that right now we are thinking about in the spring time kind of timeframe.

Let me start with two groups of recommendations. This first is called for immediate action and the reason for immediate action is that decisions here, recommendations here could actually impact Stage 2, there's some policy implications that could be considered by CMS and ONC as they revise their rule for Stage 2. Namely that has to do with certification of CQMs. We talked to you last time about the amount of information and feedback we got from the public on the challenges of implementing the CQM requirements. The problem is stated before you, so many, if not most of the organizations were providing their reports of how well they are doing either for internal consumption or for external public reporting from systems other than the EHRs. So, EHRs are typically designed to facilitate the care process and gathering of data, collecting data, not necessarily optimize for reporting aggregate data. So many people were taking extracts out of the EHR and putting them into a reporting system.

Now the EMR, the MU certification rules state that the healthcare organization must use certified EHRs to report on CQM measures ultimately to CMS. Good intent, but because of what I just said most people are using actually non-certified systems, reporting systems not certified EHRs to actually report them. That became a problem and the reason is point 3, which is that EHR vendors where then hardwiring the calculations so they could get certified for these CQM reports and the vendors themselves were making decisions on which data elements we're going to plug into calculation and essentially defining the workflow to capture the data for the CQM reporting. Well that put providers in a bind because not everybody used the same data elements or used the same workflow so literally people, this is what we heard about, were redesigning their complete clinical workflow to fulfill the way that the vendor chose to implement the CQM, that was a bit backward. And then you can be certified as a total EHR or as EHR modules, but at the moment I believe the certification requirements have all the EHR modules being certified to provide CQM measures.

So, our proposed solutions to these issues, one is to take the last one first, that HIT vendor products would only be certified for the CQMs relevant to the scope of their product. So, an ER module would not have to be certified to do CQMs that are not ER related, that is one example. The second point is that providers will be permitted to use non-certified systems to generate CQM reports as long as the data came out of a certified HIT system. So, it is still the same spirit, but not tethering the hands of the provider to a certified EHR in order to spit out the CQM report. All along though all CQMs are subject to audit just the way any other calculation is in fulfilling the Meaningful Use criteria. And then finally, that there be some available, some standard test data where you know the answers so that whether you are using a certified EHR or a non-certified reporting system you have test data you can use and generate reports and then check your answers. Now, this would not be a certification process, so we're not saying in addition to getting a certified EHR you also have to certify the provider creating the reports, the reports are subject to audit and you would have to prove that you know that your system, the way you calculate these things, is probably correct. That's it for the immediate recommendations, things that could in fact affect Stage 2.

Now looking at recommendations that relate to CQMs that need a longer lead time, so we are 4 years out from Stage 3 but it takes a lot of time to go from a brand new measure to getting them calculated in the EHR, getting them spit out and getting them implemented. So, the first one we are proposing something we are sort of referring to as a CQM platform. So, you recall the problem was EHR vendors are hardwiring these Meaningful Use CQM measures into their systems, but what that means is if there is an error, and we certainly heard about some vendors maybe misinterpreted or literally just have an error or the rules change and you need an upgrade of the entire system to get that to fit and that causes a lot of extra effort.

Second, we talked about how the vendor's definition of a CQM implicitly makes assumption on the clinical workflow and those workflows are not the same in every provider organization. And finally, we concentrate on CQM because it is part of this program or even if you look at public reported measures more broadly it still does not fill the whole gamut of information and feedback that an organization could use to improve quality. So, the idea here is to use these systems, these EHR systems to capture data and to produce reports that help people improve and report on their quality. So, that would speak to having, our solution is a CQM platform onto or into which providers would plug in quality measures whether it is for public reporting or quality improvement, these are standardized ways of looking at your performance with the purpose of improving them.

So, we are trying to give HIT Standards Committee sufficient lead time to work towards a Stage 3 world where EHR vendors would develop this CQM platform that would accept these standardized plug in's. So, the standardized plug in's means that it would define the data elements that go into the calculation of the measure, but a local organization would configure which data element measure of systolic blood pressure, where do you store that in your world, your configuration of your EHR and that suits your workflow of gathering that data. So, those are local variables yet you are still measuring blood pressure in this example.

So, that is sort of our conceptual view of this kind of a platform where every vendor would support these standardized plug in's. So, we are suggesting, we are recommending that the HIT Standards Committee develop certification criteria that would encourage and require this platform to be in place as soon as possible and the idea would be Stage 3.

The next recommendation has to do with patient reported data and clinical quality measures. So, most CQMs are written by clinicians, for clinicians and only understood by clinicians and hence not really serving the patient good, the ultimate consumer of this. So, how do we have a platform for creating CQMs that incorporate information that will be most meaningful to consumers? So, part of the proposal, and you've heard this before, is to include one, patient reported data but to measures that are meaningful to patients, and outcomes that are meaningful to patients. So, the ask then is that HIT vendors and here we are talking about HIT more broadly because it is not just clinicians facing EHRs, but you can imagine PHRs collecting this data. So, HIT vendors would develop a secure patient friendly way of getting

information directly from patients that could be incorporated into CQM calculations and reports and that patients have a way to access those. So we are looking for measures that matter to patients and informing them and probably it is going to depend on some data that comes from patients. So, how do we accommodate that? Lots of challenges again, which this is why we are providing this ask up front with this lead time.

Next one is to look at, and this came up in the Quality Measure Workgroup letter about measure concepts, something called delta measures or at least we are referring to it as delta measures. So, right now most CQMs provide risk adjusted population means. But how does a patient turn something about what happens to the averages for the population being served and how does that apply to me? The mean could be improving, just because you took some of the most uncontrolled disease measures and brought them into better control or you only accepted people who were under control, lots of ways where you are not really paying attention to individuals.

So, our proposed solution then is one way to help motivate and measure the providers attention to each individual, to make it "patient centered" is to say let's see what percent of your patients are you improving from their current state, that is far more likely to be meaningful to the patient then saying "what have done with your population means?" So, the proposal here then is that EHR vendors, over time, should be able to calculate these kinds of measures so it's no longer just a mean across all populations, and it is not a hard calculation for a computer, it is just that we need to be thinking about those things.

So, as a follow-up, so you can tell that there is a lot of new or at least emerging work that is involved in achieving these goals. The plan really is to get the folks that are both impacted by and a beneficiary of this kind of change into a group and have a summit and sort of get on the same page, as well as understand what are the barriers and opportunities to moving in this direction. So, the thought is to have a summit on this topic involving all of the stakeholders and then having a working group immediately following to start laying out a strategy and plans on how to get there. And as I said, we are thinking about spring for that.

So, in short, sort of an overview, from a certification point-of-view we are saying clinical quality measures should be based on clinical data that comes from a certified EHR that is reported using standard definitions, all of which are subject to audit, but that the provider can report on these to CMS from non-certified systems so long as it meets the above.

The second point, in order to give ultimate flexibility or at least more flexibility to providers trying to use these measures to continuously improve is to have vendor neutral CQM platforms that would accept standardized CQM plug in's that are localized to the local workflow and finally that we focus a lot more attention on patient centered CQMs, CQMs that would have more meaning to patients and talk about and would motivate and incentivize providers to attend to each individual patient's needs.

So, at this point I know we have gone through a lot. We are going to also give you a brief update on the specialist's subgroup. I have done the majority of the presentation because George has been on a safari in Tanzania for the past couple of weeks. So, George has been leading the specialist subgroup.

**George Hripcsak – Columbia University NYC**

Thank you, Paul. So the work on engaging specialists is in progress. I'll just mention there are a couple of things we are looking at, for example using registries in an alternative way for specialist to report approved quality measures. A second example would be closing the loop so we have, if a physician wants to give a referral to a specialist it has to be that referral that is already in Meaningful Use but we need to close the loop so the summary of the consultation comes back to the referring provider and in fact that should be shared with patients. Those are the kinds of things we are looking at.

The one I wanted to present today was relevant to the Standards Committee and that is why I've put it in here and that is related to images. First of all, images are particularly relevant to specialist and I think both specialist and primary care providers stand to benefit from a free sharing of images. So, in the first case, and John Halamka already talked about it this morning, is continuing working on standards to

promote the sharing of images and promote their ability to view images from a common viewer. These are things that John talked about for March, April, May and June. So this will be getting done in April, May and June that's fine.

So, then the question is what do we do next? There is a question of how far can we get by Stage 3 in terms of sharing images? Sharing images and having a seamless environment, is it really feasible to have a PAC system in the EHR, you know, feel like it is combined into a single system and have those images share among the various providers and there is some disagreement in the group about how quickly we can get there. So, the idea is that we'd like to collaborate with the Standards Committee and brainstorm beyond standards alone, what can we get to by Stage 3? Perhaps it will probably take the form of a hearing jointly between the Standards and Policy Committee sometime in the future talking about images and what is the next step beyond a combination of brainstorming, what is possible and figuring out how to do it, you know, having the Standards and the Policy Committee at the same meeting avoids the to and fro and the iterative kind of pork we have to do and saying no that's going too far. So, that is our hope for images.

**Paul Tang – Palo Alto Medical Foundation**
Okay, so I want to open it up for questions, discussion. Ultimately, want to seek your approval on something so that we can move it onto standards. So, David Lansky?

**David Lansky – Pacific Business Group on Health – President & CEO**
Well, first I really want to thank you for putting so much effort and thought into this set of recommendations and your personal leadership is important to this and thank you for moving this along. These are really important issues. There are a couple on here that struck me as needing some more thinking. I just want to tee them up for everybody's reaction. One is on the recommendation one. This line of what's certified, what's not certified and what's critical to reporting quality measures and what's not is still a little murky to me when I asked myself what is the Meaningful Use objective we have in mind? And to the extent we go down the path suggested about using noncertified systems to generate the reports, as long as the data came from a certified system, that implies that the Meaningful Use objective for certification is the data quality underneath, but not the capability of the certified technology to produce the quality measure itself. There is some independent system potentially doing that manipulation of data and I don't have an opinion about that right or wrong but this seems a little ambiguous in where our spotlight is as a Meaningful Use criteria in particular in the HITECH vault, so that is one.

The second thing I'm a little hesitant on is on recommendation three on the patient reported data and there my hesitation is I think this is a bigger problem and something the Standards Committee should try to address at this time. I think it's primarily not a standards problem but an architecture problem and a policy problem and so it's a very valuable contribution to our work to raise this for discussion, but I'd be a little hesitant to expect much from the Standards Committee on this one until there's been a higher order concept put together around where the patient can provide that data. I don't think the EHR is likely to be the platform for acquiring patient source data. It may be a place that is then brought in and used for a variety of purposes, but as we have with the patient experience surveys that are ubiquitous, we've now have a whole industry nationally of people collecting data from patients using various standards and with a blessing from CMS and all the rest of it. That's a whole independent infrastructure that we may want to take advantage of to address this goal as people are doing health status and functional measures, there are different platforms in place that are perhaps trusted by patients that are going to be mobile platforms and patient's have easy access to. So it's just a very complicated environment and I don't know that the Standards Committee will be ready to wade into the idea that patient friendly systems should be under the auspices of HIT vendors. It doesn't feel like an obvious direction, to me.

**Paul Tang – Palo Alto Medical Foundation**
Good point. Can I ask you one question about your first recommendation on one? So, the quality measure. The reports on quality measures essentially is sort of an outcome measure for the whole use of EHRs themselves. If there is an intermediary noncertified system between the actual report of our performance and you think that detracts from the Meaningful Use Program? Is that my understanding?

**David Lansky – Pacific Business Group on Health – President & CEO**
Maybe it's just an ambiguity in the wording and now I hear what you're saying. That second bullet, maybe the phrase "CQM reports" is not clear to me. You don't mean in that phrasing, you don't mean the measures; you mean the reports of the measures?

**Paul Tang – Palo Alto Medical Foundation**
The reports of the measures, correct.

**David Lansky – Pacific Business Group on Health – President & CEO**
But the calculations would still be handled within the EHR product?

**Paul Tang – Palo Alto Medical Foundation**
No, the thought was that the EHR routinely collects a certain amount of data. That's a good thing. It routinely collects it in a standardized way that can be combined, that's a good thing. Can you also make the same system spit out the calculation of the measure and is that a requirement of an EHR system versus the end result being useful? Do you see what I'm saying?

**George Hripcsak – Columbia University NYC**
Let's step back to how we got here. So, number one we weren't removing the requirements for the EHR to have to do this. So, your certified EHR has to be able to produce these reports and send them to CMS and show them to you. So that has not changed. We were meeting the needs of people who are ahead of the curve on reporting quality measures now and using an external system and not forcing them to do it twice by doing it in the current one by which they are doing quality improvement not just reporting. Let them use their quality improvement system that they've already used which is outside of their EHR but using the EHR did it. So, use that to review it and send it to CMS rather than have them retool their entire enterprise to use the EHR product. Each EHR product will be able to do it because it will be a certified EHR, but they can use this noncertified product. So, it was accommodating people who are ahead of the curve and not introducing unintended consequences.

**Paul Tang – Palo Alto Medical Foundation**
Let me speak about that second point, which is inadvertently as EHR vendors incorporated or hardwired their interpretation of the CQM, that caused people to have to essentially design the workflow around that particular interpretation of a measure and that was an unintended side-effect that affected a lot of folks according to different folks.

**George Hripcsak – Columbia University NYC**
That's a different consequence, but yes. David is that…

**David Lansky – Pacific Business Group on Health – President & CEO**
I will just recuse myself. I can't tie this back to certification requirements of which piece and what are we asking the Standards Committee to do?

**Paul Tang – Palo Alto Medical Foundation**
To consider recommendations to ONC that would modify the certification requirements allowing for people to produce quality reports using data out of a certified EHR system that meet the requirements.

**David Lansky – Pacific Business Group on Health – President & CEO**
I thought George just said you still had to do…

**Paul Tang – Palo Alto Medical Foundation**
Well, but the Standards Committee makes recommendations about the certification. And so Doug, did you have a comment on this particular point? Yeah?

**Doug Fridsma, MD, PhD, FACMI – Office of the National Coordinator – Director Office of Standards & Interoperability**

So, there are a number of things that we're working on within ONC to help us understand better how to assure that someone when they calculated quality measure that they do so in a way that is consistent. So, we have a project with MITRE to develop a test data set that we can read in, we know what the answer is, we apply a quality measure and then we can compare the output of that. So, that begins to set the stage for the possibility of a modular kind of certification. The thing is, is that you need three things to make that work, you need a standardized input into that module, you need a standardized output from that model, and you need a standardized way of describing the quality measure that can be read in. Those three things are necessary to sort of get to the point where you can kind of eliminate the notion of a noncertified system, because you can actually test.

Now, to make that module, if you will, work with an existing EHR, we have to then make sure that the EHRs are capable of outputting the thing that would be the input into the quality measure reporting system. So, there are some challenges that we have with regard to the standards that are out there and the maturity of those standards. But we certainly recognize the need. I think everybody would rather have a module that was certified, but we have to kind of incrementally build towards getting those standards in place that would allow something like that to occur.

**Neil Calman – The Institute for Family Health – President and Cofounder**
Could you just give an example? You said you are working on one. Could you just maybe tell us what that looks like?

**Doug Fridsma, MD, PhD, FACMI – Office of the National Coordinator – Director Office of Standards & Interoperability**
Well, what we're doing is we're creating a series of test patient data that uses the CCR and CCD standard and then with MITRE and their tool called popHealth using that as sort of our calculation engine, so the project itself will select patients from this test data set of which we know what the quality measure answer would be if they were going to do diabetes or whatever it was and then one can imagine that if you had that test data set and you knew what the answer was, you could start to certify.

Now, the problem we have is we don't have a clear unambiguous way of representing the quality measure. So, this has also been a learning process for us because in fact many times we'll get the quality measure descriptions from CMS and they'll be in Excel spreadsheets and there will be choices that will have to be made about how to implement that. In the initial past, these things are, as Paul has talked about, they are sort of even hardcoded within the popHealth tool because there is no good syntax for it, but I think you heard from John Halamka that this is a clear and very important part of what we need to do.

We've also done some work with Query Health, which is one of our standards and interoperability. And if you think about Query Health which is about identifying a subset of patients out of a larger population, that is the same general problem that a quality measure has, to identify a numerator and a denominator out of a subset of a larger patient population. And so some of that work has been looking at a format called HQMF, I'm sorry I just want to get it right, HQMF which is a standard that CMS is thinking about to represent quality measures. And so, we have been doing some work already in trying to simplify and trying to figure out how to make to make it easier to implement and whether that would be appropriate for our ability to standardized a computable way of looking at quality measures.

So, I can't say that all of the pieces have necessarily converged on a solution and we've got a number of initiatives that are tackling different parts of the problem. But, ultimately, what you would like to be able to do is you would like to be able to certify a quality measure by saying here is a test data set and here's a quality measure, tell us what the answer is make sure that they can generate that. That helps us prevent problems with mappings internally within the EHR or the ability that they've made specific choices in the way they've hardcoded it. There are a variety of things that might be present. But, I think if we had those three things and we had that test data set we would be a long way towards being able to get to that sort of certifiable quality measure reporting tool.

**Paul Tang – Palo Alto Medical Foundation**

Charles?

**Charles Kennedy, MD – CEO Accountable Care Solutions - Aetna**
So, I think I'm sharing David's thought over here, so let me try and see if I'm understanding this correctly. So, going to recommendation one for post solutions. The second bullet says that it would be okay to use a noncertified systems such as a clinical data repository, but you require the data to come from certified HIT systems. We don't certify lab systems, right? So, why would I care whether the lab data came directly from the lab system into my clinical data repository? I mean, why do we need that level of specificity I guess is my question?

**Paul Tang – Palo Alto Medical Foundation**
Well, that's the way it is currently. So, everything including the reports would have to come from your EHR even if it came from the noncertified lab system. What we're doing is we're at least giving a little bit of a reprieve to how you generate the report, that was the point of this so that one, you could take advantage of these more powerful reporting tools, and, two, you didn't inadvertently force a specific workflow into the clinical delivery process.

**Charles Kennedy, MD – CEO Accountable Care Solutions - Aetna**
Then the other question I had was on recommendation two. We talk about a CQM platform. Should I think of that as a clinical data repository? Or is that something embedded in the EMR?

**Paul Tang – Palo Alto Medical Foundation**
This one is embedded in the EHR. Okay.

**Charles Kennedy, MD – CEO Accountable Care Solutions - Aetna**
And I'm not sure I understand what a CQM plug-in is?

**Paul Tang – Palo Alto Medical Foundation**
So, if you could imagine a little bit like what Doug was saying where the three things that are very unambiguously specified, you could plug that into this CQM platform in the EHR and have it perform a calculation.

**Charles Kennedy, MD – CEO Accountable Care Solutions - Aetna**
So, today could a CQM plug-in be a separate clinical data repository that is seamlessly interfaced within the EHR or is this something that has to be a component of the EHR?

**George Hripcsak – Columbia University NYC**
The plug-in is a definition of a quality measure that is computable. So, I would download it…plug it into my EHR and suddenly I'm doing that quality measure now.

**Charles Kennedy, MD – CEO Accountable Care Solutions - Aetna**
Okay, got it.

**Paul Tang – Palo Alto Medical Foundation**
So, you could see how it keeps up with the times so that professional societies changing the definitions inside the plug-in automatically changes and you just plug that in and anyone has it.

**Charles Kennedy, MD – CEO Accountable Care Solutions - Aetna**
Got it, okay.

**Paul Tang – Palo Alto Medical Foundation**
It is much more component type. Christine?

**Christine Bechtel – National Partnership for Women & Families**
My question was actually the same as Charles was and I think I understood your answer, but it doesn't totally get to my concern. I was in the MAP meeting last week, the Measure Applications Partnership,

and we were talking about HIT enabled and HIT sensitive measures. And if I step back and think about longitudinal measures and multi-setting measures which is ultimately where we need to go, then it begs the question for me, is it possible that we will want people to use whatever system, whether it is this separate CQM calculation system or an EHR or whatever to calculate quality measures that are fed by data that does not inherently live in the certified EHR? So, you have a hospital information system that is not necessarily a certified EHR or Charles used a lab example or patient generated data, in my mind, I think it is possible, but tell me if I'm wrong, that we would want multi-setting longitudinal data and I'm not sure that we care whether it goes into the CQM report generating, you know, doo-dad or the EHR, technical term. So, if that's the case, than my question/point is I'm worried about saying as long as all the data used in a calculation of the measure come from a certified system.

**Paul Tang – Palo Alto Medical Foundation**
No, that is a very good question. It'll go back to a little bit of what David Lansky said which is just the fact that we're allowing a way of calculating the measure independent of the EHR doesn't mean we want to deprive the caregivers from having that access to that information. So, in that sense, in order to calculate a longitudinal measure you're saying, oh I'm going to take some data from here and some data from here and essentially bypassing the EHR that the provider is using, we will, I think, have undermined the value of collecting all of that information in the EHR that is being used by the care provider to make decisions. Does that make sense?

**Christine Bechtel – National Partnership for Women & Families**
Yes, so what you're saying is if I am getting multi-setting data from other sources or longitudinal data, then by saying all of the data is essentially safety checked to make sure that that data was elsewhere, actually gets into the EHR and then moves over there.

**Paul Tang – Palo Alto Medical Foundation**
Yes. So, the EHR is the repository and the presentation of data necessary for a provider to make decisions on a patient. You would want that provider to have access to everything. As a decoupled component, there are proper reporting tools that the recommendations, they don't necessarily have to be certified as an EHR in order to deliver the reporting components. Jodi, are you commenting on this point?

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**
Yes.

**Paul Tang – Palo Alto Medical Foundation**
Okay.

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**
So, I'm thinking about this from our policy perspective and trying to understand, I'm still not understanding why you are making that recommendation that the calculation would not be a certified product? I mean, we have modules, I understand that it might be separate from the EHR that is installed in the hospital say, but why wouldn't we then be encouraging that external calculation capability to be a certified module, you know, under our approach?

**Paul Tang – Palo Alto Medical Foundation**
A lot of the reason was motivated from what we heard from the providers, the most of which had already gone through the exercise of attesting. And they found that the specific implementation that an individual vendor might have was very limiting. So, if we tether the reporting to a vendor in a sense, they are not able to generalize the reporting capabilities that they need in order to measure and improve their organization. That was sort of the feedback. So, we came up with this potential solution of decoupling it, because it was not the intent of Meaningful Use to limit the reporting capabilities and what you could report on, yet, we wanted all the information to be captured and rendered back.

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**
So, there's the capture, there's the calculation and there's the reporting?

**Paul Tang – Palo Alto Medical Foundation**
Yes.

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**
So, put reporting aside for a second. But, the calculation?

**Paul Tang – Palo Alto Medical Foundation**
So, as David mentioned, each EHR should be certified to do it all.

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**
Right.

**Paul Tang – Palo Alto Medical Foundation**
But, we don't want it to be a tether or a limitation. So, if an organization chooses to employ other reporting capabilities, and one of the reasons they would do that is to provide feedback back to the providers on Meaningful Use CQMs as well as other things for quality improvement, then that would be okay.

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**
But is it impossible for those untethered capabilities to be certified?

**Paul Tang – Palo Alto Medical Foundation**
It's not impossible, it's just they were saying that is the current status.

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**
Currently they are not, okay.

**Paul Tang – Palo Alto Medical Foundation**
Everybody would have to go get their reporting system certified. So, they still have that opportunity, but we're trying to…

**George Hripcsak – Columbia University NYC**
Well this might just be relevant for the next "n" years and then it is no longer relevant. It's just that they came and said, what did they say, 75% of the effort was this one problem, so why can't we address this one thing in this way.

**Paul Tang – Palo Alto Medical Foundation**
So, that was a really interesting statistic. So, of all the money, and a lot of people track how much they are spending for Meaningful Use implementation, in this particular case it was 75% spent just on the care and feeding of CQM reporting. And a lot of it was because it's tethered to an individual EHR product and then having to make that work. And they literally redesign their clinical workflow as part of the change. So, we're trying to get out of that conundrum. Judy?

**Judy Faulkner – EPIC Systems Corporation**
I have been actually asked, did that have anything to do with getting the electronic information to the patients and the percent of patients report that was part of the reprinting that had to be done?

**Paul Tang – Palo Alto Medical Foundation**

I think most of it was the CQM related to quality measures pertaining to the clinicians.

**Judy Faulkner – EPIC Systems Corporation**
Okay, because, one of the things that we recognize is there was some stuff approved by the HIT Policy Committee that then went onto ONC and CMS and I think in the HIT Policy Committee it was recommended in a certain form. By the time it got finished, I think the vendor or vendors thought it was something much more stringent. And when either CMS or ONC was asked personally about it, it was defined as much more stringent and it cost a lot of extra work for the healthcare organizations who questioned whether it should be so stringent. So, in a way, if in fact one interesting thing is, what if the vendor of the certified EMR analyzes it and reports on it in way "x" which is what they think is correct, but it is more work for the healthcare organization, the healthcare organization then goes and gets another vendor who interprets it in a much less effort way. Then the question is it right or not right? Shouldn't the original problem be solved?

**Paul Tang – Palo Alto Medical Foundation**
So, that was yet another problem in addition to the CQM calculation.

**Judy Faulkner – EPIC Systems Corporation**
Yeah, because we've been in the middle of that and it becomes a very difficult thing where the feedback we think we're getting is this stringent way, is required.

**Paul Tang – Palo Alto Medical Foundation**
So, just as a point of fact, that is useful to make more visible, the calculation of the CQM must be done in a certified way. The calculation of fulfilling an objective does not have to be the way that the vendor chose, that's something people, am I correct Rob, and that is something people probably misinterpreted, but in the case that you're mentioning, it turns out that the customers could have interpreted it in the way that let's say CMS does and not the vendor.

**Judy Faulkner – EPIC Systems Corporation**
Okay.

**Paul Tang – Palo Alto Medical Foundation**
So that is a useful account for that.

**Judy Faulkner – EPIC Systems Corporation**
Well, we just still have to be thoughtful about that.

**Paul Tang – Palo Alto Medical Foundation**
Very right.

**Judy Faulkner – EPIC Systems Corporation**
The problem that there could be a gap between the two ways.

**Paul Tang – Palo Alto Medical Foundation**
Correct. Joe? Oh, I'm sorry Neil is perpendicular, sorry.

**Neil Calman – The Institute for Family Health – President and Cofounder**
So, just to make the point from the provider point of view, again, here would be my ideal world and I think it is somewhere between one and two or on top of one and two and I don't know what it is, but what I want and what would be most useful for our organization and our community would be for our vendor to create a reliable, flexible reporting system that as issues came up that we needed to understand better, we could go to and we would be able to create those kinds of reports and save them for future use.

Then, what I want from Meaningful Use is I want Meaningful Use to give me a bunch of these things and say these are five we need you to do and I'm going to go into the very same flexible reporting system that I would use to do something that one of my providers dreamed up yesterday that they wanted a report on,

and go to that and what I want Doug to do is to create tests that aren't necessarily, we're going to give you a blood pressure thing and we want to see if it works, but test that say take all of the patients that haven't been in the last two years and report on them by race and ethnicity if their blood pressure is over 150/180 and whatever that test is, and to be able to run those tests against a system that is designed to be flexible.

So, what I'm afraid of is what we're getting is sort of a hybrid here. What we're getting are tests around the CQM measures that are going to be part of Meaningful Use, but what I really want to have tested is the integrity of the reporting system that I can use flexibly around the issues that are important to me. So, I'm sorry if that makes it even more confusing, but, you know, I feel like what is happening is we're sort of obsessing over the Meaningful Use measure thing and how that's going to be and whether it's certified or not, but that's not really what is going to be important, not just to me but to the community in the long run, it's going to be the integrity of these reporting systems and that is really tough right now. It is really tough to take a simple question and ask it against a database, let alone within one system, let alone doing it comparatively across systems. And that's where I think we get back to what we were talking about this morning, which is if the definitions become regular of like what is a visit and what periods of time are we talking about, and all of the data definitions are defined, then I think we aren't that far way from being able to do what it is we're asking for and then I think the Meaningful Use measures become just, you know, in a sense test scripts against that flexible reporting system.

**Paul Tang – Palo Alto Medical Foundation**
So, I think the recommendations as intended fulfill your dream for those three recommendations except that the standard test data set wasn't as broad as what you just described.

**Neil Calman – The Institute for Family Health – President and Cofounder**
Right the standard test data set the way Doug described it is really around the Meaningful Use measures and it doesn't really test the integrity of the flexible reporting system.

**Paul Tang – Palo Alto Medical Foundation**
Do you have a specific comment on this Doug?

**Doug Fridsma, MD, PhD, FACMI – Office of the National Coordinator – Director Office of Standards & Interoperability**
I think just two points, one is, John Halamka when he talked about the discussions that are going to happen in the HIT Standards Committee indicated that he really wants a query language that would allow you to ask that. And the work that we are doing with Query Health, which is again that generalized ability to ask a question and quality measures is an example of a kind of question that you might ask, that is certainly on the radar of where we would like to go. So, if there is the sense that we're only focused on just, you know, a highly specialized way of just doing quality reporting, that I don't think is the intent or the end goal. But it is sort of we need to get there incrementally and work on those things that are going to be important first, with a look at that longer vision.

**Paul Tang – Palo Alto Medical Foundation**
Okay, Joe?

**Joe Francis – Veterans Health Administration**

Well, I just wanted to amplify one point and it is related to what Neil just commented on. I think earlier when David raised the concern, you framed this issue as kind of a grandfathering issue for the systems that people had already made investments in and being involved in measurement I think there's always going to be a need for some intermediate system that extracts data from an EHR but then looks across it to make sure that mistakes did not creep in. We work in a very complex world and as a lab system gets updated and does not interface your data architecture has some problem with the one to many or the many to one relationships across variables. You have certain rules about when you have a bunch of blood pressures for one patient which one do you use? And that requires some, and I think to actually pull and take a look across multiple measures, multiple providers, I don't care whether that system itself is

considered a module or something else; I don't know whether the population health portal concept could embody that. But, I think if you want exactitude for measurement when it is used for comparison and accountability that kind of layer will always be required. If it is just a single practice doing internal QI and internal benchmarking, a few errors creep in no big deal, if you are consistent you're probably going to get better with patient care, but I don't think that is going to be the health platform of the future.

**Paul Tang – Palo Alto Medical Foundation**
Paul Egerman?

**Paul Egerman – Businessman/Entrepreneur**
Perhaps, what I'm about to say is similar to what has been said but perhaps from a different perspective. The way I look at these recommendations, it feels to me like one part of the recommendation is we are sort of designing an EHR system yet we see architecture saying, you know, we want this platform and we want these other elements and I don't think that is what we should be doing on a policy basis. We should be simply saying a high-level things like we need a flexible reporting system, you know, and that flexible reporting system could be what we call a module, but that is what we need a flexible reporting system that's able to produce these quality measures among other things and I think that's all you really need to say and that has to be part of the certified EHR and we not worry about how the vendors actually implement that, you know, let them implement it however they want, but simply stick with what the requirements are for the providers, which I think is what Neil was talking about, also.

**Paul Tang – Palo Alto Medical Foundation**
I think that's fair. I guess what we thought we were doing is we did that with Stage 1, we got the feedback and we're trying to be responsive to say, and platform isn't even an architecture it's a concept that we want to take, we want to decouple calculations performed on data in the EHR from the certification process for an EHR, that was the purpose. The challenges people spoke about are addressed by this construct. The construct was to address the feedback, not to design the EHRs as you were saying.

**Paul Egerman – Businessman/Entrepreneur**
It feels to me like you are.

**Deven McGraw – Center for Democracy & Technology – Director**
Yeah, actually the term platform is like a technical solution. It's a term often used to describe a form of…

**Paul Egerman – Businessman/Entrepreneur**
Yeah.

**Paul Tang – Palo Alto Medical Foundation**
So if we had the same attributes, but came up with perhaps even different words, because platform does have sort of a technical association, then are we on the right track?

**Paul Egerman – Businessman/Entrepreneur**
What caused me to react the way I did, Paul, was I read the problem is that it is hardwired. The solution is a platform and then I said well maybe the problem is not that it's hardwired, the problem is that there is a lack of flexibility, in other words it's not necessarily that it is hardwired, I'd like to state the problem in a different way than how it is being implemented. I would like to state the problem in terms of from the user's perspective, in other words from the provider, the hospital's perspective what is the problem? Is it a lack of flexibility? And then say, okay, here is the policy so you can address that.

**George Hripcsak – Columbia University NYC**
So, you would prefer it to be stated as users should be able to define new quality measures according to their needs number one and number two, it should be possible to obtain a computable quality measure from outside somewhere, say your society, and put it into your EHR and have it work somehow or other?

**Paul Egerman – Businessman/Entrepreneur**

Yes, if you did that, which seems more like a policy statement and let the Standards Committee figure out the stuff about platforms.

**George Hripcsak – Columbia University NYC**
Platform and plug-in is kind of a trigger word.

**Paul Egerman – Businessman/Entrepreneur**
Right.

**Paul Tang – Palo Alto Medical Foundation**
So, those are trigger words. So, we meant exactly what you said. Let me give you another manifestation of this contributed hardwiring. So, hardwire meant that if there was either a different interpretation or an error, you would actually have to upgrade your system in order to get that fixed. And then from the vendor's point of view, they would have to actually get recertified. That is what we mean by its hardwired. So, it basically created an immense inertia on both parties to do anything but deal with whatever came out, which is why we found providers reformatting their whole workflow just because they did not want to take another upgrade and the vendor did not want to produce another solution.

**Paul Egerman – Businessman/Entrepreneur**
I like what George said.

**Paul Tang – Palo Alto Medical Foundation**
Okay so we will work on the words.

**Paul Egerman – Businessman/Entrepreneur**
That would be great. It is a phrase in terms of here is the problem, here is what we want as the solution without defining what the platform and the actual solution is.

**Paul Tang – Palo Alto Medical Foundation**
Okay. Fair. Deven?

**Deven McGraw – Center for Democracy & Technology – Director**
Mine is a simple question which is that these recommendations, especially number 3, focusing on patient reported data are directed at the measure, CQM aspect of Meaningful Use. I just wanted to make sure that this is not the end of the conversation on patient reported data and Meaningful Use outside of the measurement question, i.e., with respect to meeting clinical objectives, okay?

**Paul Tang – Palo Alto Medical Foundation**
Now, remember all these things are directed toward HITSC so they can start working on the quality measure side.

**Deven McGraw – Center for Democracy & Technology – Director**
Right.

**Paul Tang – Palo Alto Medical Foundation**
It's not touching...

**Deven McGraw – Center for Democracy & Technology – Director**
Right, I mean, the reason why asked it is because we know we have some technical hurdles to overcome with respect to patient reported data coming into EHRs generally, so I just want to make sure that was still on the radar screen.

**Paul Tang – Palo Alto Medical Foundation**
Certainly.

**Deven McGraw – Center for Democracy & Technology – Director**
Okay.

**Paul Tang – Palo Alto Medical Foundation**
So, if they had this data, how would they develop certification criteria so that they could report it? Marc?

**Marc Overhage – Siemens Healthcare**
I feel like Rick Santorum at the end of the podium saying the same thing. So, I don't think in the short-term or the long-term, whatever solution around reporting has to be part or should be part necessarily of the EHR. I think that could be a very viable stand-alone solution that not every vendor would then have to go build. But, if the Standards Committee gave us the input, as Doug said, to that process and that was standardized so we knew what was going in and then we had the calculations, we were getting those from the standard organization, then your reporting is going to be appropriate. Now, whether that should be certified or not, I think that is a debatable issue. So, that was a couple of points.

We're talking about, ultimately, the whole set of quality measures, right? I mean, we have a subset here, but somewhere we're aggregating all quality measures. It would nice that somewhere in this process that that's brought together because the concept is wonderful. I mean I really like your recommendations.

Your second recommendation in the details you mentioned the word required and in your summary you recommended the word should. I like should a lot better.

**Paul Tang – Palo Alto Medical Foundation**
Is that recommendation two?

**Marc Overhage – Siemens Healthcare**
Yeah, recommendation two. But that is just my preference. And then the last thing George, in your recommendation around common viewer, is that what you really meant, or did you really mean that they could look at the image that was sent to them, you know, appropriately? Because, I mean common viewer has a connotation to me that is a little different.

**George Hripcsak – Columbia University NYC**
Okay, so first of all, this is not a recommendation that you are voting on, this is just an FY that is what was after the summary. So don't worry about the exact wording. Really the intent is the easability for a user to view an image.

**Marc Overhage – Siemens Healthcare**
Okay.

**George Hripcsak – Columbia University NYC**
I don't care how it's implemented.

**Marc Overhage – Siemens Healthcare**
Okay. Good.

**Paul Tang – Palo Alto Medical Foundation**
Thank you, Marc. Christine?

**Christine Bechtel – National Partnership for Women & Families**
Are we going to be voting on recommendation 1?

**Paul Tang – Palo Alto Medical Foundation**
Hopefully we are voting on each recommendation. All recommendations.

**Christine Bechtel – National Partnership for Women & Families**

Oh, okay, all right. So, let me come back to that one for a second. I understood the answer to my question, but I think what's making me a little bit apprehensive about this, I completely agree with 99% of what is in here, but all the data having to come through the EHR and therefore live in the EHR is giving me some unease and I think it is because that this is a recommendation that is essentially telling people where data should live. And I think that is a departure from what most of our, if not all of our approach has been in the past. So, I'm worried that if this data has to live in everybody's individual EHRs, I'm not sure that we are about saying the data lives in the sense that, you know, do we really care as long as the data is accessible and it gets pulled to or pointed to through the CQM report, that's where I just don't understand enough to understand the implications of that and whether it means that we're just creating huge amounts of data that have to live in everybody's individual EHR. It is just making me nervous.

**George Hripcsak – Columbia University NYC**
Just to explain how we got there, if we don't do recommendation one, then when you do a quality measure your EHR is doing it and therefore any data that is in the quality measure will be coming somehow through your EHR because that is where the quality measurement system is and what Paul is saying is that well if we're going to make this addition that allows you to do something a little more flexible, we don't want you to use this as a back door to circumvent the EHR. Therefore if you're going to paste something onto the bottom of your EHR to do quality measurement, make sure that the data still goes through the regular mechanism that you would have to do if we never did this recommendation.

**Paul Tang – Palo Alto Medical Foundation**
So, in other words it's already the way it currently has to be in the EHR. That isn't the change.

**Christine Bechtel – National Partnership for Women & Families**
But I thought that's what we found in the hearing.

**Paul Tang – Palo Alto Medical Foundation**
…

**Christine Bechtel – National Partnership for Women & Families**
Right.

**Paul Tang – Palo Alto Medical Foundation**
And I thought that what we found was that people were in fact using separate modules? So let's forget what the current requirement is, because everybody agrees that is not so good, that one has some problems. So, if you're using a separate module, does the data have to live in your EHR system or somewhere in your entity if you're pulling data from external unrelated systems? In other words things that are outside of my own healthcare system, this is where I have some consternation because I don't completely understand it.

**George Hripcsak – Columbia University NYC**
Okay, so I guess, the thing says, what is the exact word, derived from.

**Christine Bechtel – National Partnership for Women & Families**
All data.

**George Hripcsak – Columbia University NYC**
Which doesn't actually state stored in. So, you know, if there is some federated data model, the point is the data that you're using to generate the quality measures should be available to the doctor.

**Christine Bechtel – National Partnership for Women & Families**
Right, but I'm saying it's not.

**George Hripcsak – Columbia University NYC**
I mean to the eligible professional who would be using the EHR to get to those data and that is what we meant by that.

**Christine Bechtel – National Partnership for Women & Families**
Right, but it seems to me that if it's available to the eligible professional for the purpose of quality measurement it's available in the care process and so why would we say that all of that has to come out of the EHR, because that feels like a data storage piece.

**Paul Tang – Palo Alto Medical Foundation**
So, if we said through, that would be okay?

**Deven McGraw – Center for Democracy & Technology – Director**
I think we can eliminate that bullet.

**Christine Bechtel – National Partnership for Women & Families**
No, I think the bullet is important, because you should be able to use a noncertified systems to generate a report.

**Deven McGraw – Center for Democracy & Technology – Director**
Right.

**Christine Bechtel – National Partnership for Women & Families**
My issue is the phrase "all" or the word "all the data."

**George Hripcsak – Columbia University NYC**
So forget the word "all."

**Christine Bechtel – National Partnership for Women & Families**
Yeah, that is my only issue is "all the data used in the calculation has to be derived from a certified system."

**Paul Tang – Palo Alto Medical Foundation**
But that is the way it is now.

**Christine Bechtel – National Partnership for Women & Families**
So, and?

**Paul Tang – Palo Alto Medical Foundation**
How do you want to change that?

**Christine Bechtel – National Partnership for Women & Families**
Well, I mean, it's…

**Paul Tang – Palo Alto Medical Foundation**
Okay would you accept the word through, because then we are trying to get around this, what George said, which is if we change that then all of a sudden you have to start thinking the EHR as long as you can put together a report and that's…

**Christine Bechtel – National Partnership for Women & Families**
Which I get that. I understand that.

**George Hripcsak – Columbia University NYC**
It has to be available to the EHR is kind of what you're getting at. Paul is calling it through.

**Deven McGraw – Center for Democracy & Technology – Director**
Available, to, makes a lot more sense to me. I mean, I get that you don't want people circumventing their EHRs and using a subsidiary system, but I have to believe that there is a lot of disincentive to doing that,

because essentially, you're kicking your EHR to the curb because it is not working for you anymore, including for regular clinical care.

**Christine Bechtel – National Partnership for Women & Families**
Right, I mean a lot of the information you're going to want to get for quality measures is going to be really important for decision-support.

**Deven McGraw – Center for Democracy & Technology – Director**
Right, but not always all of it, right?

**Christine Bechtel – National Partnership for Women & Families**
Right.

**Deven McGraw – Center for Democracy & Technology – Director**
So if you've got a measure like say patient experience of care, right? You might need to report on it, but you don't necessarily need to be storing that data in your clinical EHR?

**George Hripcsak – Columbia University NYC**
So, here, let me give you a counter example though. Let's say what could happen, what could have gone wrong, the reason it has ended up in there, so you don't collect the data from the eligible professional anymore, you have some other paraprofessional who enters the data into this secondary quality measurement system. So now the professional is not entering the vital signs or some key part that is needed for this quality measure, the professional is now out of the loop and someone else who is not really the primary provider for the patient enters it into this separate system, and even if it's available to the EHR it seems like it's just moved it out of the workflow, like so when you're collecting data from someone you want it to be collected in the EHR and then get in there. You're thinking of when it's from some other eligible professional, another hospital why do I have to store that in the local EHR. I agree with that, but the people in your doctor's office should be using the EHR to enter data not this quality measurement system.

**Christine Bechtel – National Partnership for Women & Families**
Yeah, no, I get that. I think, you know, we've tried to sort of shy away from being overly prescriptive about dictating workflows and I think this is dictating a different workflow, right? In a way, which is we'll make sure it's available in the EHR and I think part of my assumption here is of course it's going to be available in the EHR because you're reporting on a quality measure that you're performing on and you're not going to perform well if the data you're using to report on, you don't even know what it is, right? So, I mean…

**George Hripcsak – Columbia University NYC**
I wouldn't leave that…

**Paul Tang – Palo Alto Medical Foundation**
Somehow I need to bring this discussion a little bit…would the point that would help us get through this particular point is to figure out the wording so that it is not a requirement that all data is stored in the EHR. We will finesse those words so that concern goes away.

**Christine Bechtel – National Partnership for Women & Families**
That's good. Thank you. Yes.

**Paul Tang – Palo Alto Medical Foundation**
Okay. So, we'll try to get to these. Did you want to make a comment, Larry?

**Larry Wolf – Kindred Healthcare – Senior Consulting Architect**
Yes. So, I wish I was offering some brilliant way to rework and get us out of our bind, but what I'm hearing around the table is what I have sort of experienced myself. When I first read these I was like, yes, this is terrific. And what was terrific for me is that we were saying, yes people spend a lot of effort

getting their reporting systems to work right and having lived through many generations of those, clinical and otherwise, every vendor comes to me saying I have the solution for you, and I go that's great, but there is this other data I need to look at as part of the context of this first thing you are giving me, and so I feel like I'm always breaking the rules of whatever the vendor supplied me whether it's a certified EHR or not. So, it's a general problem with reporting, the scope of what people want to look at included in the data doesn't usually match neatly to the boundaries of the products. So, I think it's an inherent problem in the reporting system.

So, I think the notion of making it more flexible is the right way to go. And I like the notion of really taking seriously the stuff from this morning about really what I see as building a detailed data model so you can do these things. You can reuse the data flexibly for reporting. You can use it for decision-support. You can use it to see the consumer tools and that this is really the heart of what we are trying to do and we want to get away from the only way you can get this data in is to use this particular pathway, because that causes all kinds of those problems, as we have been hearing. So, I really like the intention of all these recommendations but I sort of feel like I'm with the committee on tripping over the words and I don't know that saying well let's come back to it next month is going to help, because I don't know that we've given you real guidance in terms of how to fix the words.

**Paul Tang – Palo Alto Medical Foundation**
So, I'll try to, why don't I go through each of them and try to reflect back the major points that I heard and if you agree with how we would edit those then see if that is acceptable. So, for recommendation 1, I think the major point we heard, as long as David Lansky and Charles are now, you know, understanding what we intended, that is to not give the impression that everything has to be stored in the EHR but that it is accessible to the people who are providing care and our main point here is to try to do what Larry just said which is give some flexibility and untether the calculation from actually the version of the software that you are using. That's the major one. Did I hit the major point then? Okay.

For number two, I think people actually did agree with the intent here. We got tripped up on the word that both platform and plug-in have sort of a technical under tone and we want to remove that and replace it with language that talks about the flexibility that we intended in using those words. That we want people again not to have to deal with upgrades to just change every measure they want, but to have a standardized way where people can share the actual measures themselves and create new ones. That was the major point, there.

For three, I think it was just a clarification Deven asked that this is not in any way limiting the functionality of the EHR or PHR, whatever HIT says that we use for patients and that is true. Nobody commented on delta measures. So, those are the four recommendations.

**M**
I support the notion of being able to do segmentation of the population the slicing and dicing is really, really critical and that risk adjustment often loses that import granularity. So, I think there are some very key concepts in there besides just the deltaness of the measure.

**Paul Tang – Palo Alto Medical Foundation**
Yes, but actually it's covered in the Stage 3 proposed objective. Okay, any motion to approve these recommendations?

**Deven McGraw – Center for Democracy & Technology – Director**
The conceptual version that you just described?

**Paul Tang – Palo Alto Medical Foundation**
Yes, as amended and refined.

**M**
So moved.

**Paul Tang – Palo Alto Medical Foundation**
Second?

**M**
Second.

**Paul Tang – Palo Alto Medical Foundation**
Any further discussions? And all in favor?

**M/W**
Aye. Aye.

**Paul Tang – Palo Alto Medical Foundation**
Good. There is further discussion. Yes, Judy?

**Judy Faulkner – EPIC Systems Corporation**
Yeah, a whole different thing. I'm trying to talk to folks back at the office too. Yeah, I have a channel actually. I'm concerned about doability. There's no sense in approving something that if in fact the vendors say they can't do it then that is what I'm trying to find out. Some of these things really are great aspirationally, but we're not being wise practically. And I'm trying to figure that out as we read all of this stuff. For example, the thing about the CPM reports being flexible. Great aspirationally.

**Paul Tang – Palo Alto Medical Foundation**
So, which one?

**Judy Faulkner – EPIC Systems Corporation**
No, what am I doing, the CQ, that was number one, right? Was that number one?

**M**
Two.

**Judy Faulkner – EPIC Systems Corporation**
Two. Yeah. Okay, CQM platform which new ones can be added without requiring an upgrade. That's so vague that can't a new one be added or even a whole series of new ones that really the vendors have not created a platform that this will work for because we come up with different methods, different requirements here that the platform based on what we've done so far and the assumption that everything will be similar to what we've done so far is a wrong assumption and in fact they can't create that. So, that is what I'm trying to focus on right now. How do we find out if it's doable?

**George Hripcsak – Columbia University NYC**
So, I think, first Paul Egerman's comment helps a little bit, because we're not going to be prescribing that it's a platform and therefore that you have to change your platform, we are just stating to the Standards Committee our desire for it to be flexible so you can add a quality measure and you don't just get your quality measures from the vendor. That's basically what number two says. But, you can add a quality measure yourself. And I think that's a reasonable requirement to ask of the Standards Committee, remember we're not making this recommendation to ONC or CMS at this time. We're just asking the Standards Committee are these reasonable questions to ask of the Standards Committee at this point. They can come back and say that it's not feasible still.

**Judy Faulkner – EPIC Systems Corporation**
Okay, so I'm maybe it is not feasible. But, I guess I don't get it, then. In fact, that is what I'm getting back from people. People don't get it at the other side. They're probably thinking of how do we do it technically?

**George Hripcsak – Columbia University NYC**

Well, you know, instead of having orders predefined by the vendors so that here's all the drugs that you can do in my system and if we have a new drug come into formulary you have to go back to the vendor to get a new upgrade your system, we want it so that you can add a new drug to your formulary and be able to order that new drug. Analogously, we would like to be able to put in a quality measure that you care about, not just the ones in Meaningful Use, one that you care about and put that quality measure in and measure it. Then, it says in the longer-term, that means not Stage 3 or whatever stage, some future stage be able to plug that is the thing that Doug Fridsma was talking about where you have standards and you define these three things, that's harder to do, but the first one, which is by Stage 3 it is simply, I want to be able to define a quality measure in my EHR.

**Paul Tang – Palo Alto Medical Foundation**
I think your folks will be able to understand better once we rewrite it along the lines that Paul Egerman was suggesting.

**Judy Faulkner – EPIC Systems Corporation**
Yeah.

**Paul Tang – Palo Alto Medical Foundation**
Because they are probably reacting to platform.

**Judy Faulkner – EPIC Systems Corporation**
Then maybe we should wait that way. Some of the feedback I'm getting is if we use noncertified, then those systems needs to spend time and resources certifying in that area. Does that mean that the vendors then will say, since there is that out we don't have to do that anymore?

**George Hripcsak – Columbia University NYC**
No, actually it says or should have said that the EHR has to be able to produce quality measures and send them to CMS still, that has not changed. This is giving the user an out to use a separate system.

**Judy Faulkner – EPIC Systems Corporation**
Okay. All right. I'm still concerned about, it says, well and you have to reword it, vendors should develop a platform onto which new and evolving CQMs can be added to an EHR without requiring an upgrade. And that maybe, that's the part that I'm worried…

**Deven McGraw – Center for Democracy & Technology – Director**
Well, I wonder, we've never tried to be the technical experts ourselves as a Policy Committee. I wonder whether it's worth passing these on conceptually to the standards committee for feedback, which would allow us, not that we can't revisit anything that we get subsequent feedback on that we've ever done and we've certainly done that in the past, but in terms of sort of acknowledging that there are some technical issues that are going to have to be worked out. We tend to rely on the Standards Committee for technical feasibility, which, you know, would also give Judy's team some time to sort of explore this in some more detail and be able to provide some feedback to the standards folks on that. I just don't think that we don't rely on ourselves to provide that technical expertise nor necessarily should we and that conceptually, if we are onboard with exploring this in further detail and asking standards to explore it in further detail, I think we should do that.

**Judy Faulkner – EPIC Systems Corporation**
And, I'm okay if we sort of say it that way. If we could put into explore the feasibility of doing it then I'm fine.

**Deven McGraw – Center for Democracy & Technology – Director**
Yeah, I mean we want it done, right? But, we acknowledge that there are technical issues.

**Paul Tang – Palo Alto Medical Foundation**

So, let me just clarify that that is what we're asking this committee to weigh in on is, is this the direction that this committee would like to go for the purpose of Meaningful Use qualification? That we turn to our standard folks who have more of the technical experience and expertise, they can come back to us. That's the whole iteration. It is not a throw over the wall. We're trying to do this early enough so we can get more impact, input both from the Standards Committee and the vendors. And we will reword it so that it's not as scary as what it might have sounded like. David Lansky?

**David Lansky – Pacific Business Group on Health – President & CEO**
Yeah, I'd like to have a suggestion. I guess I would frame the whole thing as a request for a sort of feasibility report or a comment from the Standards Committee addressing each of these proposals rather than having them go off and think they're developing standards, which I think is premature. And, I think there are two areas where we're not quite ready. One is feasibility, where Judy is right, and the other is what I call a policy framework. Most of this is really Stage 3 material and as we said in the last half-hour, it's raising a number of strategic policy and architectural questions that we probably haven't thought through yet including, all of the things Christine described about where data comes from, construct a quality measures for 2016 and so on, whether it needs to be in the EHR or doesn't. Does it affect clinical care or is it a population level measure, etcetera, etcetera, etcetera. A lot of things that are important policy questions that we should tackle. But, I don't think we're ready to have someone develop standards around the implementation of these ideas. So, I would send it back to us for additional thinking on the policy side. So, I was going to abstain from the vote, because I don't want to vote against this package, because I like it, but I don't think it's ready for specification.

**Paul Tang – Palo Alto Medical Foundation**
So, let me help to address those comments by saying, in the preamble to the HIT Standards Committee, we would be saying that these are conceptually approved by the Standards Committee, to pass onto the Standards Committee for their input in terms of essentially a readiness and feasibility of these standards and to implement these policies and what are standards available to even support that. It's a lot of readiness and feasibility. So, I think that's a key thing we'd be looking for input from the Standards Committee. Does that satisfy a lot of the concerns? Any other discussion before we vote? Okay, so voting on approval of these recommendations to the Standards Committee for their feedback on the implementation readiness for Stage 3 or they could come back and say no not Stage 3, but two years after that or whatever?

So with that proviso, all in favor? And any opposed? Okay, so let's get a count. So, all in favor? One, two, three, four, five, six, seven, eight, nine, ten. Opposed? One, two, three, four. Abstained? Okay. So the vote is 11 to 4 and so we'll pass this on with that preamble and with the revisions to the language that we discussed. Good, thank you.

And let me tee up Betsy Humphreys to talk about vocabulary and value sets.

**Betsy Humphreys – Deputy Director – National Library of Medicine**
And Doug.

**Paul Tang – Palo Alto Medical Foundation**
And Doug. Good luck.

**Deven McGraw – Center for Democracy & Technology – Director**
Here's the key word, Paul, update, not seeking approval of recommendations.

**Christine Bechtel – National Partnership for Women & Families**
You don't have to approve a thing.

**Deven McGraw – Center for Democracy & Technology – Director**
That's right, that's easy. Thank you.

**Doug Fridsma, MD, PhD, FACMI – Office of the National Coordinator – Director Office of Standards & Interoperability**

Since we are going to be restarting the Quality Improvement Workgroup within the HIT Standards Committee, this was a very helpful discussion and we will bring that back and have them take a look at it. So, thank you for all the thoughtful discussion. I am delighted to be joining here with Betsy Humphreys from the National Library of Medicine and to give you an update on a couple of things. One is, I want to go through a few slides that sort of talk about this notion of a portfolio of building blocks that has been our approach within the HIT Standards Committee and within ONC in terms of getting the technical infrastructure that can support policy recommendations that are coming out of this committee. And then to take at least one of those layers, to take a look at the vocabulary layer and give you an update to assure you that the work we're doing is not vaporware but in fact we do have some things that we're working on that should be available as we move forward.

So, the first thing that I want to do and I start every presentation off with this slide is that there are three things that I do in my office of standards and interoperability. So, the first is that we enable stakeholders to come together and identify simple, shared solutions to common information exchange problems. And so you've heard a lot about the standards and interoperability framework and our mechanism to sort of operationalize it. This fits into our role to enable people to come together and come up with shared solutions. Government is a platform, a way of enabling people to come up with good things that will work.

The second thing that we do is we curate a portfolio of standards, services, and policies that accelerate information exchange. And I like the word curate because it's an active word. It says that we've got this portfolio that we test, that we add to, that we deprecate, that we make sure they all work together. It's kind of like what an art museum would do to the galleries in the sense that you want to make sure that all of the pieces fit together in a way that makes sense and so this curation part is an important part and that is what we're going to focus on today.

And then the final part or the final thing that we do in our office is then we enforce compliance, which means if you follow the standards and you've done a good job with that, it should mean something so that you can actually say, I've passed the test. I've done the right thing and that if you want to send me information, you have some assurances that I will be conforming to the kinds of standards that are out there and publically available. Enable, curate, enforce. I just do three things.

So, we are going to talk today just about curating this portfolio of standards and so what I want to do is I want to sort step through this. Because we've talked about it for a while, but I want to set it in a clinical context so that people kind of understand how the pieces fit together and I welcome certainly feedback if we can communicate this more effective, but I want you guys to kind of be my guinea pigs about this.

So, we, about a year and a half ago, redefined and maybe two years now, what the nationwide health information network was. We said it's a set of services, standards and policies that enable secure health information exchange to occur over the internet. So, it wasn't a network. It wasn't an appliance that you plugged into a backroom. It's not something that you put into the wall and connected up to the internet, but it was a collection of things that allowed us to exchange information over the internet.

And so this right here, this slide represents kind of a collection of building blocks that we're currently working with. Now, it's not entirely complete. There are probably a few that I'm missing, but it gets a little messy. But, I think what's important is down the side there are five colored boxes and so when we think about interoperability and information exchange, we have to be able to represent things in standardize ways using vocabularies that computers can understand, that can translate our definition of blood pressure into a code that a computer can understand. We need to take those vocabularies and code sets and we need to put them into a package. So, if what you're trying to do is exchange information on laboratory test, you need to be able to say what was the name of the laboratory test and what the result of that laboratory test might be and whether there are any particular conditions and the name and address of the patient perhaps.

So, you have vocabularies, you take those vocabularies and code sets and you put them into a structure that allows you to convey it and then we have transport standards. So, we have things like the direct project which is that secure e-mail base, but we've also got things like secure web services that many of our federal partners are using as part of their mechanisms for exchange. We have security, and I pull that out in particular because I think it's critical to recognize that is an important part of our interoperability stack. And we've got different ways of securing things using different kinds of building block technology.

And, finally, there are services, and what I mean by services are all the things that help route things around and allow you to find the security certificates that you need or find a person's address, all the supporting services that are important for information exchange. And so we've got a whole set of different building blocks, vocabularies, different content standards, transportation standards, security standards and services that help enable information exchange to occur. And that really defines our portfolio, all the building blocks that you would need to assemble.

So, I want to just step through a patient care scenario and how this might work, now one would hope that a primary care provider or a clinician, or the like would never have to dive deep into what these building blocks are, but just to give you a peek under the hood, as we think through how information exchange might occur, I just want to step through this scenario.

So, this is not going to be unfamiliar to the clinicians. The primary care doctor orders a laboratory test and gets the test results back from the lab. She schedules the patient to be seen in the office to review the results. Then based on the results of the test, the primary care doctor decides to send the patient to a subspecialist. She sends a summary of care record to the subspecialist electronically with a summary of the most recent visit. Now, when the patient comes to see the subspecialist it becomes apparent that there is a missing test that was done at a different hospital that would be helpful in taking care of this particular patient. Rather than repeating the test, the doctor then queries the outside hospital for that laboratory test result and tries to get that back in time to be able to take care of the patient.

So, if we break that down into the three component of that use case, in the first case, the physician orders an outpatient laboratory test on a patient and the lab sends that information to the office. So the patient is there to get that result. What that translates in from our building blocks is that we need to have vocabularies like LOINC that described laboratory test. We need to put that into the standard which is the HL7 laboratory results implementation guide. We need to take those two things and connect it to say direct as a way of transporting that securing it with a digital certificate that encrypts it and makes it unreadable en route in transit and that we may need to have a way of finding that certificate through what we call DNS or a domain name server and the like. And so you can see there are a couple of building blocks that would be necessary to help support this kind of information exchange.

Now, the patient now needs to go to the subspecialist and based on that laboratory test the doctor decides to send a summary of care. They can then go to their electronic health record extract, based on the standards, that summary of care record and what we need there is a couple of other things. We need SNOMED for example maybe to describe the problems. We need LOINC to include the laboratory test and maybe we need RxNorm as a way of describing the drugs that the patient is currently on. All of those vocabularies are used to describe what we call a consolidated CDA care summary, that's the package, which again gets attached to direct or a transport mechanism secured with our certificates and sent over the wire.

Finally, the patient now is seen at the subspecialist office and the doctor needs a laboratory test, now those of you again who are clinicians understand how frequently it is that a patient arrives in the clinic with all of the records in tow, but there's some critical piece of information that is now missing and that you need to try and find it and sometimes you call someone on the phone or you ask them to refax it, there are a lot of different ways to do this, but in this scenario she sends a query, using her electronic health record to another hospital that has that capability and asks for that needed laboratory test. What's important here is that maybe what we're going to be using is an ICD-10 because there is a procedure associated with it. We again use that laboratory results implementation guide, but this time we take that

same vocabulary and content and we attach it to a different transport mechanism, this time using what we call web services with different ways of securing it and different ways of finding that information through the service discovery.

So, the thing that I think is important and I want people to sort of understand is that one of the things that we're doing in ONC and through the standards that are being adopted through Meaningful Use is we are flushing out these building blocks. And I think what's important to recognize is that we were able to take the direct transport and use it to do two different kinds of care summary and a laboratory test and we were able to take a laboratory test and access it in two different ways using direct when we were trying to send that information or through a query response when we asked that question.

So, what we're trying to do is build these building blocks so that as you folks come up with new policy objectives and ways that you want to enable information exchange, we have the ability to assemble these building blocks together to solve some of those problems. And over time we expect new building blocks to be put into this portfolio. So, we may have new ways of transporting things, new kinds of content and structures and new kinds of vocabulary that would help us with it as well.

So, with that as sort of a background we're going to talk today about one of those layers. We're going to talk about what we're trying to do in our portfolio to help support vocabularies, code sets that are looking at things like SNOMED, LOINC, ICD-10, RxNorm, you know, among other kinds of resources as well. So, with that I'm going to turn things over to Betsy Humphreys who is from the National Library of Medicine and we have been working very, very closely with Betsy and her team to try to develop some of the tools and resources that will make people successful in using vocabularies and code sets.

**Betsy Humphreys – Deputy Director – National Library of Medicine**

So, I think that everybody in this room probably knows what a nice organization like NLM is doing in a place like this, but we have a few missions and one of them, we have at least for the like, well for a very long time been involved in things related to vocabulary and certainly for about the last 25 years been involved in vocabulary as it relates to health information systems. So, this is a quick overview. We support the maintenance, dissemination, and free US use of SNOMED CT and LOINC. We develop, maintain and disseminate, and use in our own services and research a number of vocabularies RxNorm most critical for this one, but also the medical subject headings, the NCBI technology and of course the UMLS metathesaurus which as a surprise provides a certain amount of functionality that helps in implementation of a lot of these things.

We create associated products and tools for users. We provide customer service at a certain level and we attempt to contribute to standards coordination and policy development here in the United States and internationally. So, as of last year, we have an interagency agreement with the Office of National Coordinator which sort of establishes or helps sets priorities for NLM's vocabulary work in support of Meaningful Use. We want to focus, obviously our level of effort and resources that we have available for this on the things that would be most useful for the national agenda and that entails making or promoting additions to the standard vocabularies where they are needed for Meaningful Use, working on some high priority subsets and mappings, and tools, and providing enhanced APIs, that's I assume, Application Program Interfaces for developers and others to get access to this stuff. And ONC has very kindly provided some additional funding to help us do some of these things.

So, I prepared this slide and then there is a test, but really this was to make the point that Doug made earlier that we are not talking about vaporware here. So, you don't really have to know all of the details. I'll just mention a few. In my view, if we say that we believe that SNOMED CT is the target that will be very valuable in terms of problem list in EHRs then there are a couple of many but special challenges for Meaningful Use, which is essentially that SNOMED CT is not heavily used in problem lists in the United States, although it is by some major organizations such as Kaiser and so there is the issue, in terms of migrating from what might be an uncontrolled or a local vocabulary developed and/or in some cases the use of ICD-9 CM to identify problems within an EHR.

And then there is the issue of using potentially SNOMED CT to add value to free text notes which is done in a variety of places today. And the other big challenge that relates to problem list and any use you might wish to make of SNOMED CT coming down the pike is obviously the requirement to implement ICD-10 CM in 2013 for billing. NLM has a number of assets that are available for the vendor community, for providers and for various types of service providers to help them get to larger uses of SNOMED CT in the problem list environment. These include obviously the release itself, a web browser, which is new in the past year available freely from NLM, the core problem list subset, which is frequency-based and therefore sort of identifies for people a subset of SNOMED. SNOMED probably has 100,000 problem related terms and concepts in it and the core problem list is about 5800 and that does account for a very high percentage of problems that are seen in healthcare organizations in the United States, a lot of lexical matching tools for getting from whatever you have now to SNOMED CT if you would like.

We distribute the convergent medical terminology from Kaiser. There are a total of about more than 13,000 problem entries from that which we have made available to people to date and we are working on mappings. I know this is a topic of great interest to Paul. There is a conceptual map from SONMED CT to ICD9-CM and that is issued and updated with each release of SNOMED international that is twice a year. We are working now on a trial version that is going from frequently used ICD-9 CM codes based on data from CMS both for outpatient and inpatient to SONMED CT. And we are actively producing, working right now on a map between SNOMED CT and ICD-10 CM for frequently occurring problems. This will be a rule based map and we will be releasing the first 2000 tool that allows you to view these and make sense of them in the initial version next month and we'll have it for about 15,000 by June of this year.

Mapping between SNOMED CT and any of these other things is not a one for one map in most cases. So, therefore, you are not saying that somebody has a whole set of data here pushes a button and gets the exact semantic equivalent in the other system. It does not work that easily. In terms of going from the set of problems that are frequently used in anybody's practice, at least in the ambulatory care setting or even in the inpatient setting, mapping within a system is possible. I think it has been done very successfully in a number of cases for people who had their own local problem list vocabulary and went to SNOMED CT. Those two are more likely to be on a straight par then ICD-9 CM or ICD-10 CM and SNOMED, but these things should be helpful.

We have a US extension to SNOMED which gives us a faster path for additions to SNOMED that might be needed in between the releases of SNOMED or if the US priorities are different from the international priorities since SNOMED CT is produced by an international organization of which NLM is the US member. And we have a new and expanding content request system which makes it easy for people to submit requests for SNOMED and we can then decide, depending on the criticality or the relationship to Meaningful Use and other US-wide priorities whether we should put that in the US extension on the way into SNOMEDs international release so it's available immediately or not or whether it's something like non-VA provider, which might be a US local term and not needed internationally.

And there is a download site for all of this stuff that is listed above and there is UMLS, and enhanced API access to SNOMED CT, and NLM, and that is being enhanced, and will be enhanced in a few months. Now, we're not the only ones who care about this, obviously and there are a range of vendors both vocabulary services vendors and EHR developers that have relevant value-added products and services to help with this type of transition for providers who wish to make it.

Now we go to RxNorm. I think that RxNorm is a clinical drug vocabulary and likely to be recommended and useful for in the future medications and medication allergies, and this is, I think a product which has been designed around a set of requirements that have come from the field and I think is in a very good place to meet them all now pretty much. So, it's updated monthly. Within it, it connects the standard RxNorm names and codes at various levels of interest, ingredients, etcetera, as well as actual drugs to NDCs, to generic names, to brand names, to active ingredients, to UMLS IDs, to IDs from many commercial drug information providers, they've been very helpful to us in this and they're available to those who have licensed those individual products, many over-the-counter drugs, thanks to FDAs recent actions in that regard. We disseminate the VAs National Drug Formulary. I'm not sure what they call RT drug classes, however, with RxNorm now we have various approaches connected to RxNorm and as

separate the Rx terms to help people use it more effectively for orders. And we update it. We release weekly the new drugs that are approved by the FDA and we have developed a current US prescribable subset of RxNorm, which is now released and that basically excludes the things that are no longer either being produced or are not approved for use in the United States. We have a browser and an API to this. It's very interesting, this is a heavily used API by a broad range of people, both, I heard yesterday, I think it was Connie, or this morning, Connie talking about the relationship between CTSAs and what we're doing around here and this is an API that is used very heavily by CTAs. Also, by vendors, also by healthcare organizations. And you won't be surprised that the most popular call is, I have an NDC I want the standard Rx name and term and it works you know, in 99.99% of the time. So, that's useful.

And we also have a way here for people to find the current versions of the IDs if they happen to have earlier versions. This is already being used by people as one mechanism to sort of update the value set either for your measure or for what you have to do. And so, this is another case where drug information providers and other vendors which would include vocabulary services and EHR developers have value-added products and services to help people if they need them. And I've just put in a little red asterisk behind several of the items I mentioned that were explicitly added to the RxNorm distribution based on requests from the various subgroups of the health HIT Standards Committee and people who testified before us.

So, we then go to LOINC. There are a lot of valuable assets available from the Regenstrief Institute and with pointers from our systems over there to those. And I think the big issue that everybody has talked about is the fact that, hey but a lot of the results come from the labs and the requirements of the HITECH act don't really actually directly target the lab. So, getting the labs to report using LOINC instead of whatever they've been using has been considered an issue that really needs to be addressed. I can only report that there really is significant progress here. The number of labs showing up for assistance or to report to the Regenstrief Institute and LOINC Committee that they are mapping everything to LOINC keeps increasing. So, I think that is very good.

And LOINC and SNOMED is another place where we're seeing the overlap between what is needed and useful for Health IT and for clinical and translational research, and one of NLMs big push is that please that the clinical research community will move to using the same standards that we're recommending for Health HIT whenever those are appropriate. So, there are two subsets that have been produced within the last year or so that are quite valuable for people who want to move from a local system to more use of LOINC or people set up something for orders and so forth for clinicians and those subsets are the top 2000+ most frequently reported out lab observations, and the other is the sort of unified set of common lab orders, value sets worked out with input from a variety of places in terms of frequency and so forth.

There are also some very good subsets for test panels and for assessment forms including all the CMS required survey instruments for long-term care. In other words there are tools to help people do this too. And again, vendors provide these services. On the public health reporting side, I think that, as you all know, there are 1000 challenges for everybody, but one of the main ones here is that if we're going to make this one work, we have to have the providers take action. We have to have the vendors take action and we also have to have the public health entities that are receiving or sending take action. So, everybody has to get up to speed. You need to have somebody receive the message when you send it. So, NLM in this area is working very closely with CDC and with the public health information network vocabulary and, I'm forgetting the name, what it stands for, but a group down there which has done a lot of good work in this area and we are closely collaborating on making sure that we've got all of the reportable conditions for both the nation and the states covered in the standard vocabulary and that we are working on making sure that we have a solid connection between the tests that are used to identify the problems and the conditions that they identify.

NLM has also been heavily involved with CDC and HRSA and others on establishing the standards for newborn screening. So, we are in active discussions and obviously going to be working with Doug's office and so forth to make sure that we get the most done and have the least duplication of effort and ensure that we have an appropriate range of access mechanisms and tools for all the effected

stakeholders and we have to realize that there may very well be multiple that are required because what suits some of the public health entities best may not be what is most useful for the EHR vendors.

And then we get to the quality measures. I'm not even going to discuss this, just to say that there are a bunch of challenges in terms of the vocabulary value sets because if you have a measure, you are likely to need a vocabulary value set to help you identify and retrieve the appropriate sets of patients for both the denominators and the numerators, you should probably know that you are using these vocabulary standards correctly when you're defining these so that you haven't misinterpreted the meaning of "x" and that is in fact not the way that's going to be used in a patient record. We want to set these up so they are maintainable as medical knowledge and standards evolve with the least level of effort by all concerned that they are implementable and that they do not greatly expand data collection burden, which I think is all the issues you were talking about this morning. So, one of the things we want to be working on, again, is what are the best ways to distribute these mechanisms, tools, etcetera that will be most helpful to implementers in terms of implementing them and keeping up-to-date with them. So, more to come on that.

And some of the potential next steps that we'll be discussing with the Standards Committee and possibly addressing through the vocabulary task force are issues about outreach and training. We've got a lot of actually very useful stuff here. We think that not everybody who needs to know it and could make use of it actually knows where to find it or how to use it. So, that's a big issue. There is this issue that Doug eluded to about getting to, and you discussed this morning too I think, consolidated distribution mechanisms, and we need to figure out if we're going to add new API features or are we adding ones that anyone will use, I mean, what are the real problems and issues that we want to solve there? And then what else could we put together in terms of premade subsets or value sets that would help people implement. So, I think that's it and I'm sure we're ready for questions and discussions if we haven't taken up all the time, already.

**Paul Tang – Palo Alto Medical Foundation**
That is the end of that. Joe?

**Joe Francis – Veterans Health Administration**
I know there's been some discussion at the HITECH level with the National Quality Forum and the quality data model and one of the questions has been as this thing gets developed, what's the proper site for this to be curated and maintained? Do you see something like that converging with these other vocabulary and content standards and being part of National Library of Medicine?

**Betsy Humphreys – Deputy Director – National Library of Medicine**
Well, I think there are two issues about curating a quality measure. One is, the actual design of the measure and whether it needs to be revised. So, for example, we have a certain quality measure because we identify what the quality of care or follow-up or something should be for patients with a certain set of conditions and that in my way of thinking is the province of the medical community through whatever consensus quality measures come up.

Then we have the other issue which is how do we represent that accurately given that this is the thing we now know we ought to measure or we need to change the measurement because we've decided that there is another group of patients or there is another set of drugs, or there is another set of procedures, or something that has to be incorporated. How do we then accurately reflect that, get a measure that is dealing with the current state of the standards, make sure that the standards cover everything that needs to be covered. So, I think certainly before the vocabulary task force, we have heard that it really has to be sort of a multidisciplinary sport to maintain a quality measure. There is the issue of what we're trying to measure, what we've learned, what we have evidence for, but then there is how do we accurately represent that in the standards and come up with something that is implementable in an EHR and doesn't add some level of documentation burden to the provider that is unsustainable. So, I guess I see us potentially as certainly our vocabulary experts and the standard developers of vocabularies being part of that team.

**Joe Francis – Veterans Health Administration**
And I'd say maybe also the repository for the model itself including the things that you would need to have as an ingredient for a measure and what standards flow into it. That's a little different than a specific metric per see.

**Betsy Humphreys – Deputy Director – National Library of Medicine**
Yes, and I think that everyone is in agreement that we need a much more consolidated approach to making all of that available and I think that we and others will be working with ONC to figure out what makes the most sense in terms of where that happens.

**Joe Francis – Veterans Health Administration**
That would be perfect.

**Paul Tang – Palo Alto Medical Foundation**
Wonderful question. Thanks, Betsy for the update.

**Paul Tang – Palo Alto Medical Foundation**
Oh, no just question.

**M**
So, maybe to follow on Joe's comment about the data model. There are a series of data models out there and I wonder, Doug, if you can you comment on whether part of the stack that you have on the left-hand side should include a model? The FDA the mini-sentinel is focused on a virtual data warehouse. NIH is invested in i2b2. We heard about CTSA earlier and others are investing in the… model. I mean there could be different boxes along another road there and how do they all relate?

**Doug Fridsma, MD, PhD, FACMI – Office of the National Coordinator – Director Office of Standards & Interoperability**
So, how many people have planes to catch? You're right. There's a variety of different things. The things that we illustrated on the portfolio obviously are a subset of the kind of resources that may be out there. I certainly think the work that Stan Huff has been doing on the…models, the work that i2b2 has, there's a whole number of different modeling efforts that are out there that fit someplace between vocabularies and value sets and the packages that you would see within an HL7 message like 251 or CDA. I didn't include that because I think those aren't at a point of maturity where we could sort of adopt them and use them just yet. But we certainly are tracking those activities and trying to figure out how they would fit into the portfolio, which are the ones that would be helpful as people are trying to achieve interoperability and Meaningful Use. So, I don't have an answer for how they all fit together except in so far as we are tracking and taking a look at them. Eventually there will probably be those kind of assets available as part of a portfolio.

**Paul Tang – Palo Alto Medical Foundation**
I have a question, Betsy, on the outreach and training, making a blogger community know about the available assets. Is there a website particularly with the ICD-10 conversion and we're trying to interdigitate the whole SNOMED, rightsizing the term vocabulary and getting SNOMED in the appropriate places. Is there a website that people can go to keep up with your released products that you're talking about?

**Betsy Humphreys – Deputy Director – National Library of Medicine**
Yes. Well the answer is, yes, but not easily at the moment. And that is actually a pretty high priority at NLM right now to get a reorganized approach to this and sort of say, you know, at some place go here if you want to know what's available that we think might help you for Meaningful Use. And, also we are looking at putting together some, you know, specific archived webinars on okay if this is your issue, you know, you're using this now, you may want to move to that and try to give some people pointers on how to do some of this. So, that is a focus of ours and I'm hoping that within the next couple of months we'll have something that is a lot better. It's all there now; it's not all that easy to find it.

**Paul Tang – Palo Alto Medical Foundation**
Doug?

**Doug Fridsma, MD, PhD, FACMI – Office of the National Coordinator – Director Office of Standards & Interoperability**
And we're working as well within some of the S&I Framework activities and some of the artifacts that are being constructed there to try to identify the best way that you can say I want to do, as that kind of portfolio approach, I want to send a directed message that includes a laboratory specification, being able to provide links to where that is in the National Library of Medicine's knowing where the HL7 standards might be located, being able to get the specifications for direct. In the sense, we've got this notion of we've given a presentation to HIT Standards Committee just briefly about that, but we're developing sort of a repository that you could go through and search and find and collect those artifacts you would need to solve a particular problem.

**Paul Tang – Palo Alto Medical Foundation**
Other questions/comments? Thank you, very much Betsy and Doug. And at this point, I think we are going to turn to public comment.

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**

Great, this is our time for public comment. We can take public comment from folks in the room or on the phone. And at this point I will ask the operator to open the lines for those on the phone who would like to make a public comment.

**Caitlin Collins – Altarum Institute**
If you are on the phone and would like to make a public comment please press *1 at this time. If you are listening via your computer you may dial 1-877-705-6006 and press *1 to be placed in the comment queue.

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**

We do have one comment, if you can open up the line for the commenter please?

**Shelly Spiro – Director of the Pharmacy e-Health Information Technology Collaborative**
Good afternoon. My name is Shelly Spiro and I'm the Director of the Pharmacy e-Health Information Technology Collaborative representing 250,000 individuals as members of the majority of the National Pharmacy Associations and key pharmacy organizations involved in health information technology. In Jodi Daniel's presentation this morning about the Policy Committee planning ideas for 2012, she mentioned engaging noneligible providers in the Meaningful Use of the electronic health record. Pharmacist play an integral role in the interprofessional healthcare team in providing medication related patient care services outside and in conjunction with prescription dispensing functions. The pharmacy industry recently provided the document, the roadmap for pharmacy HIT integration in the US healthcare. This roadmap outlines the goals, objectives and strategies for pharmacist to adopt and implement the Meaningful Use of the electronic health record.

Recently, the US public health service released a report delineating the mechanisms to optimize the role of pharmacists on the healthcare team. This report received support from the US Surgeon General, Dr. Regina Benjamin and provides the evidence policymakers need to support utilization of pharmacists as an essential part of the healthcare team. Pharmacists are one of the largest providers of immunization administration across the US. In addition, pharmacist involvement in medication related care coordination can provide significant patient care quality improvement. The collaborative hopes the HIT Policy Committee and The Office of the National Coordinator will agree engagement of pharmacists as noneligible providers of the Meaningful Use of the electronic health record will improve patient care and

help other eligible professionals meet their Meaningful Use incentives. The roadmap and the US public health service report can be found on the collaborator's website at www.pharmacyhit.org thank you.

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**

Operator, can you please open up the next line for the next commenter?

**Operator**
Our next comment is Allison Viola from AHIMA; please proceed with your comment.

**Allison Viola – American Health Information Management Association**
Hi, good afternoon everyone. I want to thank you for the great discussion. I wish I could be there today to participate. But I wanted to go back to Dr. Calman's comments from earlier this morning before the lunch break and that was regarding the usability factors and workflow as you implement electronic health records and hopefully not going more toward providers doing just enough to meet the mail so to speak and answering the information. The usability and the workflow will impact the way that data is captured and stored within an electronic health record and may impact data quality and then ultimately patient safety. So, as you look at the usability factors for EHRs, I would like to recommend that you also consider evaluating the data or considering the data as it's captured through that process. Thank you, very much.

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**

Great, and we have one more commenter, Carol Bickford.

**Carol Bickford – New York Nurses Association**
Carol Bickford from the American Nurses Association. This is a comment in relation to Jodi Daniel's presentation this morning. Thank you for expanding the thinking in relation to how our systems and our HIT solutions, and our Meaningful Use encompass everyone in the healthcare system including the nursing community, as well as other providers such as the pharmacist. Please be sure to include these providers in the thinking in relation to supporting the work for the Meaningful Use criteria because even though it may be targeted to physicians the focus of the evaluation criteria are for the patient's our primary healthcare consumers.

**Jodi Daniel, J.D., M.P.H. – Director, Office of Policy and Planning – Office of the National Coordinator for Health Information Technology**

Thank you very much. We have no more comments.

**Paul Tang – Palo Alto Medical Foundation**
Any other comments in the room? Okay, thank you, everyone for a very productive discussion. I'm sorry that we went late and we will see you next month in just a few weeks. Thanks.

# Public Comment Received During the Meeting

1. Could you please clarify the term "performance" - still unclear what this means - as used on slide 14 for example. Does 85% for CPOE mean that of those who attested 85% hit this measure?

2. Where can we find the EHR incentive payment information by location (e.g. state) and vendor that Farzad alluded to in his opening comments? I cannot recall which website this data has been posted on. Thank you.

3. I look forward to future discussions on the Legal Electronic Health Record.

4. I agree that adoption is predicated on optimization of workflow and usability. These two points and "make" or "break" an endeavor.

5. The Recovery Audit Contractors (RACs), the Zone Program Integrity Contractors (ZPICs), the Medicare Administrative Contractors (MACs), Medicaid Integrity Contractors (MICs), along with CMS, the OIG, and DOJ have extensive data on compliance and fraud detection. How the clinical record (EHR) supports the coding, the billing along with the documentation supporting medical necessity presents the IT community with tremendous opportunity. I agree, predictive modeling can play an important role. Clinical Decision Support is also important. Regarding medical necessity, Chapter 1 of the Medicare Benefits Manual is key. What was the admitting physician thinking and worried about, regarding the care of their patient. Documentation of this remains a challenge .This has to be keenly integrated (well) into the clinician's workflow.

6. Do image standards include pathology image standards?

7. Is there official guidance that stage 3 will be 2 tears after Stage 2? Would that move penalties out a year?